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ABSTRACT

This guide is intended to assist vocational English as a second language (VESL) instructors in teaching courses in carpentry and the culinary arts to residents of Navajo reservations. The first section outlines the rationale and content of the two training programs as well as the basic VESL objectives that they seek to address. The next section, a VESL learning guide, discusses the main principles of the ESL method, learning characteristics of ESL students, the ESL learning environment, curriculum development, teaching techniques (including survival and competency-based methods, the notional-functional approach, use of the world outside the classroom, and total physical response), student assessment, and placement levels. Educational goals and curriculum design are covered next. The carpentry curriculum includes 25 units that are intended to provide students with hands-on and classroom instruction in the identification, proper handling, care, and maintenance of trade tools and equipment; the fundamental processes and techniques of the carpentry trade; applicable codes and safety practices; and blueprint reading and job estimation techniques. The culinary arts curriculum teaches professional cooking skills in a 43-week, 40-hour-per-week program that includes 215 hours of culinary arts instruction, 42 hours each of classroom English and basic math, and 1,421 hours of programmed kitchen laboratory instruction. Both curricula include behavioral objectives, instructional outlines, learning activities, and quizzes. A bibliography of additional resources is included. (MN)

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BILINGUAL VOCATIONAL EDUCATION PROGRAM

Crownpoint Institute of Technology

Instructor Guide and Curriculums
for
CARPENTRY
CULINARY ARTS

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NEW MEXICO

Crownpoint Institute of Technology

Title: Bilingual Vocational Education Training

Language group served: Navaho

Occupational areas: Carpentry and Culinary Arts

Length of training: 11 months

Number of training cycles: 1 1/2

Weekly hours of vocational training: 30 hours

Weekly hours of ESL: 6 hours

Hours of job counseling: 4 hours

Grant award amount: $203,805

Number of trainees: 45

Approximate cost per trainee: $4,529

Coordinating agency: JTPA

Project Director: Gloria Arviso

Address: P.O. Drawer K
Crownpoint, New Mexico 87313

Phone: (505) 786-5851

Project runs until August 31, 1987

G0086 20033

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PHILOSOPHY STATEMENT

The Crownpoint Institute of technology as a primarily Navajo institution reflects the area's culture and Navajo language. Language is part of an individual's identity and sense of self worth. Language is at the very core of cultural values and provides the "wheels" for its transmission from one generation to another. For the Navajo, language serves as a mirror of reality. The native Navajo language becomes a vehicle or means for the Navajo student to understand and relate to the dominate society. The CIT staff feels that people's lives are important and that native people are entitled to exercise in the setting of where they live their cultural valises and their native language. They are also entitled to an education including English proficiency to ensure their personal economic self sufficiency and social well being. Test results and student performance have shown that the CIT student has limited English proficiency. This becomes an economic handicap in today's job market; one that can and must be directly addressed. This becomes the unique problem vocational training programs on the reservation must solve.

PROGRAM DESCRIPTION

CIT's answer to the situation includes the Culinary Arts vocational instructor with expertise, the VESL instructor and a bilingual aide. Classes consist of students ages nineteen to forty seven. They are all members of the Navajo tribe who learned Navajo as their first language. English was learned and used in a school setting and Navajo was the language to be used at home and with friends and relatives. As a result of the historical situation for the Navajo, many have limited proficiency in both English and Navajo. Most conversations by a native speaker are sprinkled with both languages. The fact that such a group can exist within the continental United States in difficult for mainstream Americans to understand. The Crownpoint Institute of Technology serves Navajo students who are looking primarily for educational and employment opportunities on or near the reservation.

The bilingual aide serves a special function in the program as she has gone through the Culinary Arts training herself as a student and has worked in the CIT cafeteria as a cook. She is always with the students in the class and in the kitchen. Concepts or instructions that a student may not understand are translated into Navajo for the student by her.

The Culinary Arts vocational program offers hands on training in the CIT cafeteria which serves CIT students, staff, and the general public. The training simulates on the job training leading to first day productivity for graduates. The vocational curriculum includes needed entry level skills in the commercial food service industry such as safety and sanitation procedures, proper use of hand tools and stationary equipment, food preparation methods and techniques, and basic kitchen operation procedures. Career instruction includes a sampling of entry level jobs in food service, filling out job application, writing letters of application and resumes. Attitude, punctuality reliability, cooperation and team work are among the important job values stressed in the program.

English is used as much as possible for instruction. In fact, neither the vocational instructor nor the VESL instructor speak Navajo. Instead, they rely on previous experience in teaching on the reservation and the assistance of the aide as needed. The English instruction focuses on job related language structures and vocabulary. English is often a confusing language to learn full words and multiple meanings. An example of this would be the work, "dressing." In Culinary Arts alone this word can can be used to mean three different concepts--a sauce for a salad, a stuffing for poultry and a cleaning process for freshly caught fish. In addition, many trade related vocabulary items are French in origin, examples include Garde Manager, Sous Chef, quiche, bouquet garni, and a la carte.

Students are expected to be familiar with professional methods of measurement and recipe conversion techniques. To achieve this end, instruction includes basic math skills and vocational math. Students are offered experience in cashiering, inventory methods, and menu costing procedures. Unlike some bilingual vocational programs, CIT students must learn about food preparation as it is practiced in everyday American restaurants. They can no longer learn only a minimum level of English and work in a specialty restaurant serving only Navajo cuisine as many LEP Chinese students can do who eventually intend to be employed in Chinese restaurant.

Provision is made in the program design for varying levels of achievement. Efforts are made to help students learn how to learn. Study guides based on the textbook and study techniques are stressed. To help those with special problems, individual tutoring time is scheduled as needed. Instrumental Enrichment is also offered with the primary goal of achieving cognitive modifiability.

This curriculum guide has been prepared by the staff of the Crownpoint Institute of Technology for Navajo students in the Culinary Arts and Carpentry program, which is a part of the bilingual vocational training program instituted and developed in 1987. (year).

The quality and professionalism of the staff and curriculum, the program's relationship to training and placement in the field, the actual contemporary facilities and equipment, including the selection of students that will benefit from the curriculum, and the workability, practicality of program are multi-fold and becoming indispensable to the overall success and productivity of the program.

The second courses, outline and content of the curriculum is an instrumental aspect of the program planning as it includes goals, behavioral objectives, strategies, logistics and evaluation. The curriculum focuses upon the trainee, the vocational skills to be learned and determines the particular demands of the current job market. The individualized program factors determine the needs of the population it will serve. Specific and general objects in relation to educational goals and philosophy have been stated and designed to included vocational and language skills, with employability components integrated.

The training cycle includes:

1) Conducting a model bilingual culinary and carpentry program to benefit adults with extremely limited English proficiency, little formal education and to assist the individuals in the area of employment in the restaurant or related industry which includes orientation to American culture, attitudes and way of living.

The vocational course of the Crownpoint Institute of Technology emphasizes basic preparation, cooking and safety skills necessary for the preparation of foods in the Culinary Arts program and emphasis in the Carpentry program includes introduction and preparation for entry in the constructional trade requiring semi-skilled knowledge and training.

Culinary includes analysis and recognition of foods, methods, ingredients, nomenclature, cooking methods and the deployment of dishes that are served, including garnishing and decoration. Roles of kitchen staff, basic rules of safety and sanitation constitutes part of the training cycle.

Carpentry includes detailed coverage of all aspects of light frame construction. Included are site cleaning, site layout, foundations, framing, sheathing, roofing, windows and doors, exterior furnish, interior wall floor an ceiling finish. Special emphasis is placed on the use of modern tools & materials.

Basic instructional units should include: SAFETY, APPLICATION FOR A JOB,LUMBER, BLUEPRINT READING AND BUILDING CODES, SITE SELECTION, SITE LUMBER, BLUEPRINT READING AND BUILDING CODES, SITE SELECTION, SITE PREPARATION, SITE LAYOUT, FORMING, FLOOR AND SILL FRAMING, WALL AND PARTITION FRAMING, ROOF FRAMING, ROOF MATERIALS AND APPLICATION.

--Carpentry: Prepares students for jobs currently existing in the trade with emphasis in framing, foundations, exterior finish, insulation and interior finish.

--Masonry: Training includes experience in site layout, concrete forming/pouring/finishing, block and brick laying, plastering, casting sills and lintels.

--Residential, Commercial Plumbing/Pipe Fitting: Experiences include many phases of systems rough-in, hookups for residential systems, fixture and appliance installation and systems maintenance and repair.

--Construction/Maintenance Electrician: Training consists of work performed in areas of residential, commercial and industrial electrical installation. The National Electrical Code is also covered.

--Surveying Aide: Provides job skills in areas of highway, construction and land surveying.

--Heavy Equipment Mechanics: Emphasis is in the areas of maintenance, operation, overhaul, fuel and electrical system, and hydraulics on a variety of diesel and gas-powered equipment.

--Architectural Drafting: The CIT Architectural Drafting course is designed to enable students to seek employment as entry level drafters with a specialization in architectural drafting. Basic Drafting I and Basic Drafting II will comprise the core of the program into which Architectural Drafting will be integrated. The students will also receive training in uses of Computer Aided Drafting.

--Sheet Metal: The CIT Sheet Metal course will prepare students who plan careers in sheet metals with better than entry level skills. The course will provide instruction in sheet mental processes performed with hand tools, cutting and layout tools. It will teach safety, care of tools and equipment, straight pattern development and fabrication. The training will included lab projects oriented to installation of heating and ventilation components.

The basic VESL objectives inherent in the program are to provide the learners with English communication skills required not only in coursework, but necessary in the job market and for coping with life and employment in the American employment mainstream. In Culinary Arts and in the marketplace, students will be required to : know the English names for various dishes and ingredients; answer the telephone and take orders accurately, ask and respond to a request for assistance from a co-worker; say, understand and operate cash registers in the transactions, follow and give directions, give and respond to safety warnings. Certain basic social language including greetings and farewells, introductions and pleasantries are covered as well as the completion of application forms, survival skills and other aspects such as promptness and reactions to various situations.

In Carpentry and in the field, students will be required to: understand building materials, basic technical information covering physical properties, and proper use and application of these materials and how they will function in a completed structure. Students will be provided with and opportunity to develop skills and dexterity and will be prevented with as challenge for excellence and pride as an outlook on the World of Work.

The VESL curriculum is designed and structured to include only the specific vocabulary and grammatical rhetoric required to meet the course objectives. The intensive program focuses upon grammar, reading, writing and speaking/communication skills within the program content itself and is not taught as a separate course.

The vocational program design and effectiveness is based upon integration and reinforcement. Instructor collaboration assists in the minimization, redundancy and possible omission of material. Native language is used in the vocational classes to explain the hows and whys and for clarification of concepts. Techniques used in the vocational component of the programs include demonstration of cooking methods and carpentry tasks, practice of job tasks, lectures by professionals exclusive of the program, field trips, on the job training. Trainees are under the constant supervision of the vocational instructor in Culinary Arts and Carpentry.

In Culinary, the trainees observe the preparation of dishes by Bill Burns, Food Service Manager, an expert in methods and styles of cooking, The trainees duplicate the dishes following observation and demonstration in the kitchen. the chef instructor provides recipes, conversions and methods of preparation; recipes which have been designed for restaurant cooking and often include special touches by the master chef for taste and appearance. The trainees eat the food prepared in the kitchen each day, after which the master teacher/chef comments constructively on the trainees work and performance. Time is allowed for question/answers or discussion of kitchen practice problems.

In Carpentry, the trainees will be able to perform various manual skills and concepts. Trainees will understand the design and drawing phase of project planning, the basic steps of project. Construction with logical sequences. Trainees will demonstrate on awareness of occupational opportunities upon training completion, with desirable working attitudes, relation and a sense of responsibility.

VESL is an integrated approach to language teaching, reinforcing the language structure taught, with the vocational terminology and skills incorporated and reinforced in the courses. English is the primary language and is used foremost with communication stressed. Students are encouraged in their use of the English language and the use of perfect grammar is not insisted upon. Natural interaction including speaking and listening form the core of class activities. eliciting natural spoken English and developing listening skills are stressed and are particularly important for employment.

Students are taught how to learn and suggestions are provided daily. Trainees are taught how to learn vocabulary, how to review the day's material and course of study, how to prepare for examinations, how to use the media and tapes for listening practice effectively, and how to learn from self-study. Situational dialogues become a part of the classroom activities with time devoted to listening, modeling after teacher or group, individual reading, writing, cloze exercises and instrumental enrichment ideas. Instructors utilize the following mechanisms (questions and answers, informal and formal discussions, worksheets, games, puzzles, dictation, the completion of forms. role-playing, letter writing, drills (substitution, transformation and pronunciation) and other accepted forms of learning techniques. In the Culinary Arts and Carpentry programs, logistics assist in determining the course content and the manner in which it is presented to the trainees. The components of time, space, personnel, materials, and equipment, including other resources have been carefully selected in the best interests of the trainees and objectives of the programs.

ENGLISH AS A SECOND LANGUAGE INSTRUCTOR GUIDE

1 - OVERVIEW OF THE ESL

When ordering the ESL student, it is important to realize the diversity within the ESL classroom. The classes are multi-cultural. It is common to have students from many different countries in one class.
The students are different ages. The age span is 16-80 years old. Some of the student are new arrivals, some have been in the United States for over five years, and some are U.S. born citizens.

The students have different educational backgrounds. For example, some of the students have had formal education in their native country. They can read and write their native language and possibly they are fluent in more than one language. Most students have had little or no formal education; some cannot read or write in their native language. The students have diverse English backgrounds. Multi-level classes are common.

The traditional ESL student comes to class with a past rich with experience. They have vivid memories of their home country and what they did there. They had occupations. Because of their limited ability to communicate in the English language, many students had to give up their occupations when moving to the United States. Nevertheless, there is a variety of occupations and experiences in the ESL classroom.

Students also come from different income levels. Some students are affluent or middle class; the majority, however, are in the low income level. The ESL students come to class with different expectations. They have different reasons for wanting to learn English. They have different needs, interest and levels of motivation.

Finally, ESL teachers have a responsibility to realize that the United States is a nation of immigrants. Historically, we have always been culturally rich. ESL teachers are now at the forefront. They have a responsibility to welcome the current wave of immigrants and refugees. They also have the opportunity to promote a multi-cultural society. IT is important to respect students and their diversity. ESL teachers can help students work out their dreams and problems in the United States.

2 - LEARNING CHARACTERISTICS OF THE ESL STUDENT

One of the most outstanding learning characteristics of the ESL student is their immediate need and desire to learn English. Most ESL students are highly motivated.

Because of the student diversity in the classroom, it is important for ESL teaches to realize the students' need for variety. Teachers should use a variety of methods and techniques. Lesson should be diverse, creative, and interesting. They should be relevant to students' need to have a culturally rich English class. The cultures should not be ignored. They should be discussed, compared and encouraged.

In learning a language, memory is enhanced when the sense are utilized. Therefore, to facilitate memory, students need lessons that employ at least one or more of the senses. This can be accomplished through visuals, tapes, actually bringing objects into the classroom. In addition to this, students need concrete applications to adult life.

Many of the students undergo anxiety when learning a new language and experiencing a new country and culture. Therefore, ESL teachers need to make their students feel comfortable and relaxed. Teachers should respect students as adults; reinforce student self-esteem, self-importance and potential; utilize lessons that allow students to succeed; encourage students to believe that they are important and can succeed; encourage students to be creative and to express themselves.

Because there are so many different languages and cultures in the classroom, students need clear and easy to understand lessons. It is difficult for students when the lessons are ambiguous or incomprehensible. Teachers need to design or use lessons that everyone can understand and use.

3 - LEARNING ENVIRONMENT

A primary task for any teacher is to create a classroom environment that facilitates learning. the best environment--the physical as well as social setting--is supportive, relaxed, stimulating, and respectful of the students. Yet this environment can be difficult to create; ESL teacher often don't have their own classrooms, where they can leave materials or set up a permanent learning structure. They use facilities arranged for other purposes, e.g., elementary school classes, community center meetings, vocational classes.

Within these constraints, teachers can recreate appropriate environments. A physically warm setting with moveable chairs and tables or large moveable desks allows for the most flexibility. Teachers can keep the class together for part of the lesson and then break into small groups or pairs. Teachers can move the chairs into a dialogue circle or use them in front of the class for role-play props. To create stimuli teachers can bring in magazines, pictures, flashcards, worksheets, maps, everyday objects, or any materials that reflect the adult world. These can be placed around the room for whole class activities, such as role-plays, or organized into a learning center in one corner for individual work.

The social environment is established early, in the first day or week of class. As stated earlier adult ESL students bring anxieties into the classroom. They worry about teacher expectations, tests, and failure. Many have not been back to school for years; some since elementary education. Others have never attended school.

Students therefore need a non-threatening environment so they can feel they belong to the class and are accepted by other class members. This sense of belonging is important for maintaining enrollment as other life demands can easily take precedence. Thus, teacher strategies in the first days must encourage students to get to know one another, to work together actively, and to relax in their learning by starting with lessons they can understand.

Introductions serve a more important purpose than learning names; they help create this relaxed environment. Easy autobiographical questions will enable students to say where they live now and where they come from. Active tasks like making a college of their family, community, or themselves, and then sharing it with others make people comfortable conducting an activity together. Role-plays get people talking to one another and working in groups. supportive group work is excellent for removing competition and fear of failure. (Other hints for the first week of class appear in the Teaching Techniques section)

It is helpful for teachers to imagine that they are participating in two-way learning process. Teachers are providing language instructions and their opinions. Students are sharing their lives, views and culture. Two-way learning in the classroom can be promoted by the use of dialogue. Dialogue means an equal exchange in the classroom--student to student and teacher to student. Teachers will not be the only focus of the class, but students can teach each other in student-directed conversation circles or other peer group work.

Having students believe that the class is theirs will keep up attendance. Instead of dropping out when dissatisfied, students will feel freer to say what they like and don't like about the class. students' opinions, when expressed, help teachers in their evaluation of students' progress and interest: what techniques worked well or poorly, and which lessons should be repeated, revised, or dropped.

This evaluation includes assessing whether students learned the material and whether students were actively involved, laughing and having a good time during the class. Involving students also demands that teachers ask themselves some questions: "What are my goals of teaching? What do I really want students to learn? What do I want to learn from the students? This partnership approach, using dialogue and a multi-cultural realistic curriculum, will stimulate learning, a mutual respect and a supportive classroom environment.

4 - CURRICULUM DEVELOPMENT/TEACHER-MADE MATERIALS

Preparing materials takes time and energy, but using creativity can be the most challenging and regarding aspect of teaching. ESL students come to class with diverse expectations, concerns, and language levels. To accommodate their needs, teachers need flexibility. They should also know when to create new materials. With teacher-made lessons, the curriculum can be tailored to the particular needs of each class, as individual students and as a group.

Where can teachers start in order to design lesson plans unique to each classroom? They begin by assessing student levels and expectations. Yet other information is equally valuable: students' backgrounds, cultures, and concerns. Adults bring a wealth of information and experience into the classroom. To bridge the distance between school and home, lesson plans should be based on students' real lives and past experiences. Often their reality is problematic. The majority of ESL students confront bureaucratic problems, unemployment, lack of health care, etc. These problems and the difficulty students may have learning English reinforce negative self-concepts. Curriculum, therefore (or at least part of any curriculum), must address students' real problems and help them gain confidence in learning. If students are given the opportunity to manipulate language or realistic problem-based situations, they will gain new perspectives on how to deal with their life issues.

The next question becomes how to choose methods and develop materials from students' needs and issues. The key to developing lessons is to plan ways to involve the learner as actively as possible through all the senses--seeing, hearing, speaking, reading, writing, and doing things. The following criteria may be helpful in creating materials and in avoiding techniques that inhibit learning.

1) Write lessons that are culturally appropriate. Avoid stereotypes or patronizing language.

2) Be realistic in language chosen and in situations represented. Avoid middle-class bias, assuming everyone lives one way or has access to the same services.

3) Choose a level that encourages successful learning. Avoid difficult language that would reinforce a poor self-image.

4) If materials present a problematic issue, leave it unresolved. Encourage students to express their thoughts and feelings and come to their own solutions. Be careful not to impose values.

5) Use a variety of methods and materials: written (stories, newspaper), visual (photographs), audio (tapes, songs), physical (everyday objects), and interactive (role-plays).

6) Bring in materials and situations from the world outside the classroom.
7) Make materials versatile enough so that learners can use them in different situations, in groups, as individuals, and at different rates.
8) Revise materials based on their success or failure in the classroom. Evaluate whether materials are useful in teaching language, in improving functional life skills, and in stimulating active enjoyable learning. This informal evaluation takes place constantly.

Although the majority of these criteria focus on realistic and competency-based lessons, materials without a real-world context are also important.

Games, puzzles, and music serve to enliven the classroom. worksheets and reinforce grammatical structures. The teaching techniques section describes ways to creatively use commercial texts and teacher-made materials. With teacher-prepared materials that respond to students' needs and issues, classroom learning never stagnates. The class becomes an exciting place for teachers and students to exchange life experiences and cultures.

5 - TEACHING TECHNIQUES

INTRODUCTION

Teaching English, as teachers know, is more than supplying vocabulary and language structures. It is a process of giving students the communication skills and confidence to use their new language outside the classroom and to improve their lives. Teaching methods therefore must look beyond the technical difficulties of learning English and address the blocks students may have to learning: their emotional anxieties; the physical barriers due to limited contact with English speakers; or social factors such as encountering disrespect. The content of curriculum must address these issues while at the same time being creative and flexible to meet the differing needs and levels within an average ESL class.

The overall approach to the following techniques is based on current knowledge of ESL acquisition that stresses meaningful communication (including feelings and opinions), and the need for context to the learning. This context can be a social one that brings the outside world into the classroom, or a structured activity that provides extralinguistic clues, such as objects or body movements. Thus, the best teaching techniques develop competence by encouraging students to listen and to talk about themselves, their survival needs, and the issues that affect them. although a communication-oriented curriculum stresses oral skills, effective lessons incorporate use of all the senses to help learning.

The following sections will hopefully stimulate teachers to try out new techniques and promote variety within the classroom, a key to maintaining enrollment. New teachers may wish to observe master teachers who are known for method or highly regarded by their students. The emphasis on group work, such as role-plays, conversation circles, discussions, and pair tasks serve to help teachers create the necessary supportive environment so that students can give confidence in their new language.

A - SURVIVAL AND COMPETENCY-BASED METHODS

Survival and competency-based English use students' daily needs for social functioning as the basis for curriculum. Survival English emphasizes teaching English in individual situations, e.g., going to the post office, seeing a doctor, grocery shopping, using the dictionary, interviewing for a job. Competency-based curricula include pre- and post-tests for specific learning objectives of content and skills.

Both approaches emphasize teaching problem-solving skills in realistic situations. They expect teachers to assess students' needs and issues in formulating lesson plans. Within this overall approach, written dialogues, role-plays, and stories can be used.

B - NOTIONAL-FUNCTIONAL APPROACH

A notional-functional perspective emphasizes communication skills based on what students are trying to communicate, not what situation they need language for. For example, students need to express "desire" in many situations: they want a prescription, they want to eat, they want a friend. Lesson plans are arranged around functions and notions students need to acquire. Categories may include: emotions, judgement, persuasion, agreement, disagreement, requests, commands, intention, ability, time, probability and many more.

C - FIRST DAY AND WEEK OF CLASS

The first week is extremely important for establishing rapport with students, assessing language levels, students' needs and concerns, and creating a mutual learning environment. Some hints for this week are:

1) Start with autobiographical questions. Have students introduce themselves, their native countires, their current living situation. With a world map, have students, place a straight pin at their birthplace and illustrate their immigration patters by attaching colored string from place to place. Ask students when they need English to elicit their survival concerns.

2) Set up group activities so students develop expectations for cooperative study: role-plays, college-making, games. Plan an activity that addresses an immediate student need. An activity on budgeting or money is often a good beginning lesson. One example is for teachers to bring in newspaper ads with pictures of grocery times, set them around the room, and ask students to pick out and "buy" different items. The exercise allows an assessment of students' levels, their ability to

follow directions and provides them with shopping and money skills.

3) Begin to introduce the question word: what, where, when, who, how, why. There are tools which make student sactive questioners rather than responding only to the teacher's questions.

4) Focus on activities that promote students' success and that call on oral and comprehension skills they already have. Establish an atmosphere where students ask questions, work together in groups or pairs, and begin to feet the class is their own.

D - WRITTEN DIALOGUES AND ROLE_PLAYING

Written dialogues are excellent for presenting a real situation and for encouraging full participation. They raise the class energy level, develop listening skills, and broaden students' abilities to converse in unfamiliar situations. teachers (and later students) have the opportunity to write dialogues that provide a context for learning survival/compentency-based vocabulary expressing opinions and feelings, and presenting real concerns. For example, a dialogue about going to a clinic can include survival skills like filling out forms, and discussing symptoms with the doctor, and issues, such as how students feel if they have difficulty communicating or if the doctor suggests a vacation when family and job responsibilities make rest impossible. The issues can be discussed after going through the dialogue and trying out the role-play.

To begin the lesson, the teacher reads the dialogue aloud and clarifies vocabulary. students can repeat after the teacher for intonation and pronunciation. Then different class members (even beginners) can alternate reading the parts in front of the class. as they get comfortable, students can role-play the dialogue without parts papers. The aim is communication, not memorization. Acting out parts generally leads to improvisations and humorous twists. Props can also enliven role-play interactions. Dialogues can be written at all language levels. A minimum of three parts helps keep student's attention and also diminishes any cultural prohibitions that might arise out of a man woman talking to each other. The dialogues can also be simplified to individual, pair, or group exercises for reinforcing vocabulary and grammar on the day after the role-play.

E - STORIES

The best stories come directly from student experiences. Students can tell about themselves as part of a lesson, or often will emerge during discussions. Teachers can take notes, or write down a word-for-word dictation. These stories or a fictionalized version can be rewritten for the next day's lesson. More advanced students can write their own stores for class use the next day.

Stories can also be used like written dialogues to express real situations in students' lives. When writing new stories, keep in mind certain guidelines. Let the situation unfold through the characters telling the story. If the story presents a dilemma or concern, leave the ending unresolved for students to come to their own conclusions. Make it emotionally involving to ensure a strong student reaction. keep it relatively brief, 50-200 words, with the proper mix of vocabulary, language level and grammar.

For language experience and/or teacher written stories, the lesson can proceed with students reading the stories aloud, discussing the issues, writing answers to comprehension questions and writing about their own experiences. This work can be done in large or small groups. The result is a class which continually develops its own curriculum.

F - PICTURES, COLLEGES AND DRAWINGS

Teaching with pictures provides endless possibilities for learning vocabulary, holding discussions, creating dialogues or writing exercises. Students can respond to pictures with their own feelings and opinions, or create their own pictures to express their experiences. Like stories, pictures can be brought into the classroom by both teachers and students.

a. Pictures and Photographs are easy to find. Many thrift stores sell old magazines. National Geographic contains pictures of people from all over the world. U.S. magazines provide photographs of everyday American life. Teachers and students can also take pictures of the neighborhood or students in class. students may bring in family pictures. An ambitious class can also produce illustrated photostories.

b. Colleges allow students to use photographs and other materials in creative ways. Teachers can make colleges on a theme, such as faces, styles of work clothes. students can make colleges on a theme, (family, home life), or on things they have/don't have. Students can write a sentence to complement their colleges and to generate discussions. Making colleges in class increases the energy level, class interaction and teaches functional vocabulary--pass the scissors, etc.

c. Drawings by the teacher or students can also present a them. Students can start simply by drawing answers to simple requests: draw your family, home, what you like/don't like in your neighborhood. these can be used for discussions or writing exercises.

G - CONVERSATIONAL STIMULUS

a. Sounds. In order to break the routine or to motivate student interest, the ESL teacher can use a tape or record of everyday isolated sounds. For example: someone sneezing, a heartbeat, traffic sounds, someone knocking, etc. these sounds can be used in various ways. For example, students can be asked to identify the sound. For the sneeze, students can review courtesy forms. Although sounds can be used as supplementary materials for oral practice, they can also be used to reinforce grammar and structures or for written work.

b. Taped Dialogues. ESL teachers can use taped dialogues that have vocabulary and structures that are easy to understand. However, the meaning and intention are in the listener's interpretation of them. This happens in every day conversations. The native speaker has developed the skill to interpret fragments of speech, to listen for clues in what is said, to develop sensitivity to what is not said and to distinguish between what is said and what is really meant. The dialogues can be centered around a theme that is relevant to student concerns or interest. Students can be asked questions such as: Who is speaking to whom? Where? In what circumstance?

Why? The dialogues must be mysterious in some way. This will motivate student discussion and variety of interpretation.

c. Guided Problem-Solving Discussion. Students are presented with a problem-situation in the form of a picture, written dialogue, tape or story. To start the guided discussion, teachers ask literal questions, "What do students see?" or "What is happening here?" The next level of questions asks students to relate the picture/story to their lives. The third level asks for analysis or opinions, "Why do you think that...?" Finally, questions address the ways students can resolve the issue, "What can you do?" This progression helps students develop thinking skills.

H - USE OF WORLD OUTSIDE THE CLASSROOM

One of our primary teaching goals is for students to increase their English interaction outside the classroom. As we have seen, the content of many techniques (written dialogues, stories, pictures) can make students' real lives and concerns the center of the curriculum. Outside speakers can also be useful for connecting students to community resources.

I - THE MEDIA

Everyday local and national news can stimulate interesting classroom discussions. Newspapers and magazines are an excellent tool for encouraging humor an discussions in the classroom. If teachers have access, films, slides, video, radio, television, tapes, or record players should be utilized as much as possible. This can make a class interesting and relevant to students' experience and needs. If available, the overhead and opaque projectors should be used to give the students visual reinforcement when learning.

J - READING COMPREHENSION SKILLS

Reading comprehension skills are incorporated into many of the techniques already presented. Other reading comprehension activities could include brain-storming words or ideas on the board that come from stories or dialogues. Students can develop categories from the brainstorming, reorder the ideas in their original sequence, and pick out the main idea from the ones on the board. They can retell the story in full detail or in summarized form.

K - INTEGRATED GRAMMAR

It is important for teachers to integrate grammar into a unifying relevant context. One way of doing this is by using short dialogues and picture stimuli. Using a series of picture stimuli, students can alter the dialogues to apply to the pictures. Students can practice this series in pairs or in larger groups. Later students can create conversations of their own. Grammar can also be taught through the subject areas. For example, if a class is interested American History, grammar and vocabulary related to these particular needs/interests could be taught. This can also be applied to politics, social studies, science, etc.

L - TOTAL PHYSICAL RESPONSE (T.P.T.):

T.P.R. is an excellent tool for teaching beginning and intermediate ESL students of any age level. The intent of this method is to remove stress in language learning. Stress is removed by not requiring the students to speak until they developed a large listening vocabulary and are ready to assume expressive roles. This listening vocabulary is built by requiring the students to respond physically to commands while the teacher models with various groups of students and the entire group. After this is accomplished the instructor commands without modeling. Later the instructor combines and models old and new command and finally, recombines old and new commands without modeling. T.P.R. builds on the very simple commands to the more complicated using props and pictures, etc. When students have reached the expressive stage, speaking begins with role reversal and one-word responses to questions, evolving into creating dialogues and acting them out.

M - MUSIC

Music is an ideal way to expose and discuss culture and history. Different types of American music can be used to illustrate the diversity of American culture. Folk songs can be used to discuss culture throughout American history. Students can bring in songs from their country to discuss and reinforce their native culture. This can also be a valuable tool to reinforce grammar.

N - GAMES

Games can be used at any age level or English language level. They are not merely for entertainment, but can be used to reinforce concepts taught in the classroom. They should be played in the class as an integral part of a lesson and should be directly related to the classroom work. They can also be used to provide a framework for communication. Games should be fun and interesting to each particular group of students, and should reinforce the students' language skills. They should be easily constructed and the rules should be easy to understand. Students can play game as one large group, in small groups, in pairs or alone.

O - FOREIGN LANGUAGE IN THE CLASSROOM

Whether students should be allowed to speak their native language in the classroom is the subject of much controversy. In multi-cultural classrooms, where students speak languages unknown to their teachers, multilingual lessons are nearly impossible (except when bilingual texts are available in all in the different languages). In many situations, the native language facilitates students' learning of English. The question becomes when and how to allow its usage. Allowing students to translate and explain meanings to each other can create a supportive, nonstressful atmosphere. Literacy students especially need this support. Through their native language, students can help each other catch up after absences. Most importantly, students can begin to learn about each other's cultures as they hear the different languages.

When teachers work predominantly with a single language group--especially in an area where English is not the only primary language--teachers will communicate more effectively if they know the students' language. Bilingual teaching them becomes an option for explanations or important discussions.

To promote English learning, teachers can jot down phrases on the board and translate them into English as the discussion proceeds. Follow-up lessons focusing on related English vocabulary will have special meaning from a discussion like this. Teachers with bilingual abilities also affirm the validity of bicultural/bilingual communities in the United States. Many techniques for problem-based lessons, taken from Language and Culture in Conflict: Problem Posing in the ESL Classroom.

Nina Wallerstein.

6- HOW TO ASSESS STUDENT LEVELS

A. Discussion:

As previously mentioned, there is tremendous student diversity of culture, language, and background in ESL. Therefore, formal testing is difficult. Many of the students come to registration with little or no writing skills. For this reason, informal/oral testing is often used. This section includes some examples of informal/oral test and written tests that have been used and can be successful.

The first week of classes can be used to more accurately assess student levels. Teachers can make time to talk individually with the students, and can further investigate student needs, desires, and levels. If a placement mistake has been made, students can be transferred to a higher or a lower level. For this reason, it is essential that staff members communicate and cooperate with each other.

Multi-level classes are common in ESL. The first week of classes can be used to identify student levels. Knowing student levels, needs, and interest areas will help teachers have more effective and relevant classes. Every class is different. With this essential background information, materials can be more effectively chosen and students can be more effectively divided when working in groups.

I. ORAL COMMUNICATION LEVEL

Use the Grid as a guide.

A. Start with a question using do or be, e.g. "Did you study English before?"

1. If the answer is "No" ask, "How did you learn English?" and continue.
2. If the answer is "Yes" Follow with question words only: "Where? When? How long?"

(BEG) 3. If the student does not answer appropriate place in beginning level class even if other passive proficiency test give a higher score.

4. If the student answers easily, expand, cross checking with other question words and an auxiliary combination, e.g.:

"Was your teacher____?"

"What (materials) have you ______________________________?"
verb

B. Ask enough questions to check every question word. Attempt to determine if the answers relate to the actual situation realistically.

(caution: Don't overuse "what" questions. Ask "When did you first come to this ______________?" Check later with answer to "How long have you been ______________?")

C. Ask some questions you know require a negative answer, e.g.: Is this your book? (It belongs to the school.) Follow with "Whose book is it"" To elicit a student response of "I don't know," or "Maybe."

(MID) If the student is beginning to have problems with the questions place in the middle level.

D. If the student continues to understand and answer appropriately, ask the student to describe or tell you something.

E. (ADV) A student who expands well is assigned to the advanced level.

GRID

is, are, was, did, do, does, has, have, will, can should etc.

when

where

what
(obj.)

what
(verb)

what
(subj.)

who

how

why

etc.

This informal interview gives the tester and idea of the student's oral understanding and production. The tester then assigns the level that fits student and classes available. How can reliability be checked? Give the interview to 5 person already in the program and set the standard to be followed by their answers as lower, middle, and advanced students. Does the student being tested respond like others in the lower, middle, or advanced group? Assign a level accordingly.

C - ESL PLACEMENT LEVELS

A. Level 1 (oral)

HELLO

1. What's your name?
2. Please spell your name. (Work on pronunciation of English alphabet)
3. What's your last name?
4. Are you Mr., Mrs., or Miss? (Explain term "Marital Status")
5. Are you married, single, divorced?
6. What is your address?
7. What is your phone number? Student may reply, "I don't have a telephone" But you can use this number ________________. (Teach them to write the phone number correctly)
8. Where were you born?
9. What language do you speak?
10. How many people are in your family?
11. What kind of work do you do? What is your occupation?
12. Where were you last employed?
13. What is your social security number?
14. Give a greeting to a person you meet in the morning. (Good morning)
    A. In the afternoon. (Good afternoon)
    B. In the evening. (Good evening)
    C. What do you say when you leave someone? (Good-bye, Good-night)
15. Ask a person to speak slowly, I am learning English.

16. Ask a person to repeat what they have said. (Please repeat that)

17. Ask a person how to say something in English. (How do you say ______________ in English?)

18. Ask someone where you can find the rest room or ladies or means room. (Where is the rest room?)

19. Ask another person to excuse or pardon you for something. (Pardon me or excuse me.)

20. Make a sentence with -- "I need ______________________________.

B - LEVEL II(Oral)

1. Name coins from 1 cent to a dollar bill.
2. Demonstrate that you can make change.
3. What time is it?
4. What is the date?
5. Name the days of the week.
6. Name the months of the year.
7. Count to 100.
8. Name the members of the family. (Including uncles, aunts, cousins, etc. not just your immediate family.)
9. How do you make emergency telephone calls to the:
   - A. Fire Department?
   - B. Police Department?
   - C. Ambulance, hospital or doctor?

     Note to teacher: Help student find correct emergency numbers for his home in the phone book.
   - D. How do you get help from the telephone "operator" or call "information"
   - E. How do you call "long distance"?

10. Where can you look for a job? (Tell the student about the adult school job counselor, Mrs. Pierce and the neighborhood center's Mrs. Diaz. Give them the address and phone numbers of both locations and the counselor's office hours. The head counselor at the adult center is Mr. Harry Jones.)
11. How do you ask for common medical needs in the drug store? (Example: stamps, money orders, mail packages)

C - LEVEL III (Oral)

1. Where can you shop for food?
2. Make a shopping list. Include at least four fruits, four vegetables, meat, canned goods and household cleaners.
3. Where can you buy clothes?
4. Name ten articles of clothing.
5. Name ten colors.
6. Name five rooms of the house.
7. Name six pieces of furniture.
8. Name six occupations or jobs.
9. Name six eating utensils.
10. Name the four seasons...Describe the weather. (Hot, foggy, cold, etc.)
11. Know ordinal numbers--first to thirty first.
12. Order something to eat and drink form a "hamburger stand".

D - LEVEL IV

1. Name 10 parts of the body. (External and internal)
2. When asked, "What's the matter" or "What's wrong?" answer in six different ways. Example: I have a headache, a sore throat, etc.
3. Read the label on a patent medicine container.

4. Read a thermometer. (In degrees Fahrenheit.)
    A. Know normal body temperature, 98.6 F.
    B. Normal room temperature, 72 F.
    C. Temperature at which water freezes, 32 F.
5. Identify ten items used in personal hygiene. (Soap, razor blades, etc.)
6. Make and cancel an appointment with the doctor or dentist by phone or in person using terms "checkup, appointment, nurse, insurance, bill, advice".
7. Locate the following in your community: (Possible field trips)
    A. Health center
    B. Hospital
    C. Neighborhood Center
    D. Welfare Department
    E. Social Security
    F. Legal Aid
    G. Post Office
    H. Bank
    I. Police Department
    J. Library

E - LEVEL V

SIMULATE: For some of the following the teacher may have the student do role or acting out of situations in the post office, library, etc.

1. THE POST OFFICE

A.

Give and follow directions for "How do I get to the post Office?"

B. Buy stamps.

C. Send a package and ensure it.

D. Send a registered letter, a telegram and a special delivery letter.

E. Buy a money order and an international money order.

F. Address a letter.

2. THE LIBRARY

A. Ask for help in the library.

B. Get a library card and check out a book.

3. THE BANK

A. Fill out forms to open a bank account (Savings and checking).

B. Write a check.

C. What is check stub?

4. THE SCHOOL

A. How do you find the correct school in which to enroll our child?

B. Fill in a form to enroll the child in school.

C. Write a note to your child's teacher to excuse his absence from school.

D. Simulate a conference with your child's teacher.

5. THE HOME

A. Carry on an informal telephone conversation with a friend.

6. THE BARBER AND BEAUTY SHOP

A. Act out situations in order to learn vocabulary necessary here.

7. THE DEPARTMENT STORE

A. Name various departments in a store. (Teachers may ask, "Where do you buy men's pants, etc.")

B. If you are unhappy with a purchase, how do you return or exchange it?

C. Name common clothing sizes.

8. TRANSPORTATION (For drivers)

A. Order gas by dollar amount or quantity. Ask to have tires checked, windows washed, oil and battery checked.

B. Contact a mechanic and describe a common mechanical problem.

C. Where can you get a driver's license? What are the requirements? (Age, cost, and language factors)

(For walkers)

A. How do you find out what bus to take and what time the bus will pass closest to your home?

B. Ask the driver to call a specific stop for you and also ask for a transfer.

C. How do you locate a bus stop?

9. AT WORK

A. Help individuals with vocabulary for his particular job.

F - LEVEL VI

1. Know the following measurements and five examples of how they are used.

A. a pound

B. an ounce

C. a dozen

D. a cup, a half cup, a 1/4 cup, and 1/3 cup.

E. a pint

F. a quart

G. a gallon

H. a teaspoon

    I. a tablespoon

    J. a foot

    K. a yard

    L. an inch

    M. a mile

2. Fill our a W4 form. (Employer's withholding exemption certificate)

3. Know how to count to 1,000. (Not necessarily by one's)

4. Read numbers of six figures.

5. Name four kinds of material used to make clothes.

6. Name three materials used in construction of buildings.

7. Learn the names of some tools you may use to repair things around the house.

8. Name objects you would need for sewing.

G - LEVEL VII

1. What is buying on "credit"?

2. Give advantages and disadvantages of credit and installment buying.

3. Learn about comparative shopping.

   A. Student advertisements.

      (The meaning of "sales" and "bargains")

4. Know something about contract.

   A. Signing a contract.

   B. Verbal contract.

   C. California law on signing a contract for purchases made in the home.

5. The telephone number for "Consumer Affairs" is 485-4681.

   A. What do they do?

6. HOUSING (Optional)

   A. Read rental and "For sale" ads in the classified section of the newspaper.

B. How do you use a realtor?

C. Present yourself to a landlord and ask questions about size, rent, utilities, upkeep, lease or contract.

D. Ask the seller of a house about the age, size, construction, taxes, utilities and cost (total monthly).

H - LEVEL VIII

1. Write a personal letter.
2. Write a business letter.
3. Order a meal in a restaurant. (Using a menu)
4. Plan a trip and discuss your plan. (Reservations, tickets, lodging, etc.)
5. Name recreational facilities available in your area.
6. Job Preparation

   A. Discuss personality traits that will enhance one's success on the job.

   B. Discuss the importance of the following:

      1. Being punctual
      2. Following directions of superiors.
      3. Following safety rules and regulations.
      4. Attendance and calling in when sick.
      5. Making proper use of work time.
      6. Discuss reasons why people get fired.

   C. Inquire about unions, credit unions, sick leave, wages or salary, vacation, and other general conditions of employment.

   D. Identify basic pay, overtime, and deductions (withholding, social security, retirement, union, medical insurance).

   E. Identify time terminology related to work shifts; 1st, 2nd, 3rd shifts, part-time, full-time, overtime, early, late, on time, time cards and punch-in.

7 - LESSON PLAN ONE (IN THREE PARTS)

A. Part one:

ESL: Present Continuous Tense

1. Purpose. To present an atmosphere/environment in which students can practice using the present continuous tense.
2. Object. Students will practice the present continuous tense in guided conversations.
3. Level. Beginning.
4. Prerequisites. Students have been introduced to:
    - subject pronouns
      (I, you, we, he, she,it, they)
    - the verb, to be
      (I am, you, we, they are, he, she it is)
    - the present continuous tense
      (I am walking, he, she, it is walking, we, you, they are walking)
5. Materials.
    a. Pictures from magazines showing the following verbs: eat, cook, sleep, sit, watch TV, walk, get up, study.
    b. an opaque projector (optional).
    c. An illustrated student worksheet (optional).
6. Time. 30-60 minutes
7. Procedure.
    a. Teacher writes the subject pronouns on the board.
    b. Teacher reviews the subject pronouns by pointing to different objects and people in the room. Students are

asked to identify if it is he, she, it, they, I, we or you.

c. Teacher reviews the verb "to be". Students are asked to choose am, it or are. When the teacher is convinced that they remember, she/he writes the correct form of the verb "to be" after the subject pronoun.

d. The teacher displays a picture of someone walking.

e. The teacher writes "walk" on the board.

f. The teacher walks across the room and says, "I'm walking."

The students repeat.

g. Teacher demonstrates this verb using one or more students in the classroom until it is clear.

h. Teacher writes "walking" after all the forms of the verb "to be".

i. Teacher writes on the board:

What am I doing?
What is he doing?
What is she doing?
What is it doing?

What are we doing?
What are you doing?
What are they doing?

The teacher points out that in questions, am, is and are will come before I, we, you, they, he, she and it.

Students practice briefly.

j. Teacher displays picture 1 and asks an individual student, "What is he doing?" Student responds, "He is sleeping."

k. The whole class repeats question and answer.

l. The teacher writes the question and the answer on the board.

m. The process is repeated through all eight or more pictures.

n. The students are divided into pairs. On student asks the questions, the other student answers. After they are finished, they can switch roles. If they finish before the entire group, they can create a new similar mini-conversation. The teacher goes from group to group listening and answering questions.

STUDENT WORKSHEET

What am I doing?	I am walking.
What is she doing?	She is walking.
he	He
it	It
What are we doing?	We are walking.
you	You
they	They

1. What is he doing?
2. What's Henry doing?
3. What are Tom and Martha Doing
4. What are you doing?
5. What is she doing?
6. What are you doing?
7. What's the cat doing?
8. What are the dogs doing?

B - Part two ESL: PRESENT CONTINUOUS TENSE

a. Objective. Students will play a present continuous tense concentration game.

b. Materials.

a large cork board.

15 matching cards that use the full forms of the present continuous tense (see below).

c. Time. 15-30 minutes.

d. Procedure.

1. Teacher calls on first student to choose two numbers.
2. The student chooses two numbers. The teacher uncovers the two numbers. The student reads the. The teacher asks the student if they are the same. If they are the same, teacher gives the student a prize (such as candy or gum; this is optional).
3. The game continues until all the cards are matched.

(CONCENTRATION GAME)

1. I'm walking	1. I am walking
2. He's walking	2. He is walking
3. She's walking	3. She is walking
4. It's walking	4. It is walking
5. You're walking	5. You are walking
6. We're studying	6. We are studing
7. They're getting up	7. They are getting up
8. What's she doing?	8. What is she doing?
9. I'm eating	9. I am eating
10. He's eating	10. He is eating
11. We're sitting	11. We are sitting
12. You're studying	12. You are studying
13. They're sleeping	13. They are sleeping
14. She's cooking	14. She is cooking
15. What's he doing?	15. What is he doing?

C - Part Three

ESL: Present Continuous Tense

a - Objective. Students will listen to a song in the present continuous tense. Students will answer comprehensive questions and discuss the song. If the students which, they will sing the song.

b - Materials.

A cassette tape player.

A tape of the song.

A copy of the words for the students. (Optional) Pictures from magazines (or other sources) showing the verbs used in the song.

c - Time. 15-30 minutes.

d - Procedure.

1. Teacher presents the verbs in the song. This done by showing different pictures of the verbs taken from magazines or other sources.
2. Teacher reviews the vocabulary in the song.
3. The students review the words to the song.
4. The teacher plays the first verse of the song.
5. The teacher asks questions to test comprehension.
6. The teacher replays the verse as necessary.
7. The process is repeated with the other verses.
8. The entire song is played.
9. If the students wish to sing, the teacher allows it but never forces the.

(MISTER MONDAY AND OTHER SONGS FOR THE TEACHING OF ENGLISH) Ken Wilson

1. Present Continuous Baby (Present continuous)

I'm walking down a street
I'm waiting for a bus
I'm watching an old lady
Who's holding a small dog
I'm looking through the windows

Of the shops along the way
I'm thinking of my true love
Who's the angel of the day
I can't see her
In the city of light
I can't hear her
In the dark lonely night
I'm sitting in a train
I'm looking for my true love
I'm watching an old lady
Who's holding a small dog
I'm looking through the windows
At the trees along the way
I'm thinking of my true love
Who's the angel of the day

I'm walking down a street, etc.
I can't see her, etc.

(Comprehension questions)

To avoid difficulty in the phrasing of the questions, it is better to give the hero a name.

1. Is (John) at home?
2. Is (John) in a village or a big town?
3. Who is (John) looking for?
4. What is the old lady holding?
5. What is (John) looking at in the shops?
6. Can (John) see his girl-friend?
7. Is (John) happy or sad?

8. Is the old lady's dog very big?

8 - LESSON PLAN TWO

A - How are you today? How do you feel?

a - Purpose. In the first weeks of class (beginning to intermediate levels) it is important to teach students vocabulary of "emotions" so they can fully express themselves in different situations. This immigrant's experience in the U.S.

b - Objectives.

1. To give student facility in the vocabulary of emotions.
2. To involve students in different learning experiences and methods: individual, pair, group work, use of stories, dialogues, pictures, puppets and discussion.
3. To promote discussion of family and friends and the difficulties of immigrating and living in a new place.

c - Level. Advanced beginning (with modifications, the following exercises could be tailored to beginning or intermediate levels.)

d - Materials. Photographs of people's faces expressing emotions. Opaque projector if available. Xerox of written mini-dialogues and story to distribute to students. Overhead projector if desired.

e - Time. One class period, but these activities could be extended to several if students are stimulated. Some of these activities could be repeated for reinforcement of vocabulary during other lessons.

f - Procedure. Teachers can follow this procedure exactly, or choose the exercises most appropriate for their students.

1. Start with photographs of people expressing different emotions. If it's available, use an opaque projector to project

a large image on the screen. Otherwise, pass around each picture. Ask students and have them ask each other:

"How does he/she feel?"

"Is she/he happy? sad? worried? afraid? sick?" (depends on picture)

If students are more beginning, you may need to include some total physical responses to teach vocabulary of feelings.

If students are more advanced, you can ask, "Why do you think the person is sad/happy/upset..." or ask description questions, "What is the person wearing, how old is she/he," etc.

Repeat this exercise with a variety of pictures.

2. If necessary, practice a brief drill asking student, "Are you happy, sad, hungry, thirsty, cold, hot, surprised, angry ... Is she/he sad, happy..."

3. Move to mini-dialogues presented below. Distribute them to students (by xeroxing copies, by projecting them in overhead, or by writing them on blackboard). Have students as group recite them. Make sure through body/facial expressions, if possible, that students understand. Have pairs act out mini-dialogues in front of class. (Make up other ones if necessary.)

1. Miguel: How do you feel today?
   Maria : I'm okay. How are you?
   Miguel: I'm happy.
   Maria : Why?
   Miguel: It's a beautiful day.
2. Miguel: How do you feel today?
   Maria : Not so good.

Miguel: What's the matter?

Maria : I'm homesick for my country.

Miguel: I'm sorry.

3. Miguel: How are you today?

Maria : I'm worried.

Miguel: What's wrong?

Maria : I have a test today.

Miguel: Don't worry. You'll do fine.

4. Miguel: How are you?

Maria : I'm hungry. What about you?

Miguel: I'm not hungry, but I'm thirsty.

Maria : let's go to the cafeteria.

4. Have students make puppets to act out mini-dialogues. Have them choose a few picture of faces to cut out and attach to pencils. To accustom students to cut out and attach to pencils. To accustom students to using puppets, demonstrate acting out the dialogues with puppets in front of the class. Divide students into pairs and let them practice the dialogues with each other. Then bring the class back together and role-play the dialogues in front of the class, with or without the puppets.

5. If the class is more advanced, point out there are two ways of asking the question:

How do you feel? I feel...
does she... . She feels...
How are you? I'm...
is she... She's...

6. A writing exercise could complement the oral practice. Either

have students write answer to questions about one picture they choose, or write answers to questions about themselves. For example:

How do you feel today?

Are you sad? angry... Why?

How did you feel yesterday?

Were you ________________? Why? Etc.

7. Finally, teach the following story. For reading comprehension and discussion, the time necessary is about 45 minutes. If you give a writing exercise to follow up the discussion questions, more time is needed. Type out story and hand it out to class. Have students read it and clarify vocabulary. Then start and guide discussion.

(ROLANDO VERAN"S STORY)

"I came to the U.S. a few months ago. I live with my brother and his family. In the morning, I get on the bus to go to work. I see the same people, but no one says hello. I'm a mechanic. I work alone at my brother's shop. I don't have friends here. Sometimes the man across the street comes over and works on the car with my brother. I miss my friend and family in Peru. It's hard to meet people, especially Americans."

g - Leading a Discussion. Ask students these or similar questions.

1. Start with descriptive comprehension questions:

Who does Rolando live with?

What does he do in the morning?

What is his work?

Does he work alone?

Does he have friends?

Who does he miss?

Is he lonely?

Is it hard for Rolando to meet people?

2. Ask students questions about their own experience:

Who do you live with?

Do you work alone? in the house? outside the house?

Do you have family in another country?

Do you miss them?

Do you have family here?

Do you have friends?

Do you have American friends?

Is it hard to meet people here?

3. Ask questions to elicit an analysis or understanding of the problem:

Why is it hard to meet people?

where do you meet people from your country?

Where do you meet Americans?

4. Ask what they can do to improve the situation?

Can you help people in class to meet people?

Can you tell students in class where to meet people?

where can you meet people?

Exercises taken from Language and Culture in Conflict; Problem Posing in the ESL Classroom. Nina Wallerstein, Addison-Wesley, Spring 1982.

9 -LESSON PLAN THREE

A - In a Fast Food Restaurant:

a - Purpose. Ordering in a restaurant is needed functional skill for a situation familiar to students. This lesson plan covers fundamental vocabulary for ordering and paying for food, and presents a situation of cross-cultrual mispronunciation that students often face. The purpose is to improve language interactions and make it easier for student to use English outside the classroom.

b - Objectives.

1. To teach vocabulary to order in a restaurant and pay the check.
2. To use objects from outside the classroom: menus, restaurant bills.
3. To teach expressions for polite behavior and to discuss what is impolite and polite.
4. To promote discussion on how students feel about their language and how language interactions can be improved between people from different cultures.

c - Level. Advanced beginning/intermediate

d - Materials. Xerox story to hand out to students.
Xerox writing exercises.
Menus and bill note pads from local fast-food or other restaurants. (If these are difficult to obtain, they can be made.)

e. Time. One class period, but more activities might be generated during this period for future lessons.

f. Procedures. Teachers can follow this exact procedure or choose those activities best suited for their students. Hand out the following dialogue double-spaced and typed to students. If appropriate, choose some of the discussion questions that follow the dialogue for a writing exercise after the discussion. These questions can be typed onto the same handout. Have the students first read the dialogue, alternating parts. Then ask them to act it out in front of the class (with or without props) first with their papers and thenadlibbing. when everyone has had a turn, begin the discussion.

(IN A FAST-FOOD RESTAURANT)

Waitress: Hello, is this for here or to go?

Juana : For here.

Waitress: Are you ready to order?

Juana : Yes please, We'd like two enchiladas, a hamburger, and my mother wants a burrito.

Waitress: I'm sorry. What did you say?

Jorge : Two enchiladas, a hamburger and a burrito.

Waitress: Oh, you mean two "enchiladas", a hamburger and a "burrito."

Juana : Yes please.

Waitress: What would you like to drink?

Jorge : Excuse me. What did you say, please?

Waitress: Never mind. Do you want soda?

Jorge : Yes, two cokes and what do you want, mama?

Mother : Let's go home.

Juana : Oh, mama. Don't you want pineapple juice?

Waitress: Could you hurry it up? There are other people waiting?

Juana : She wants pineapple juice.

Waitress: We have coke, seven-up and orange drink.

Jorge : Okay. three cokes please.

Waitress: Thank you. I'll bring your drinks first.

g - Leading a discussion. Ask students these or similar questions.

1. Start with descriptive comprehensions questions:

   What do they order

   Does the waitress understand Juna?

Does the waitress speak Spanish?

Does the mother like restaurants? Why not?

Is the waitress friendly? Polite?

What does she say that is polite? Impolite?

2. Ask students questions about their own experience:

   How do you feel when people don't understand you?

   How do you feel when people don't speak your language?

   How do you feel when people are impolite?

3. Ask questions to elicit an analysis or new understanding of the problem:

   Do you think everyone needs to speak English? Why or Why not?

   When do you need to speak English?

   Do you want other people to speak your language?

   Do many people in the United States come from your country?

4. Ask what they can do to improve the situation:

   What do you say when you don't understand?

   What do you say when people don't speak your language correctly? Can you teach them?

   What do you say when someone is impolite?

After the discussion, students can complete their individual writing exercises from questions taken from the "Leading the discussion" series of questions.

Or start a group exercise on the board. Place the words polite and impolite heading two columns. Ask students for the waitress impolite and polite sentences, and write the expressions in the two columns.

Ask students to add expression to the polite column. these could include:

Excuse me. I'm sorry.

Can I help you? May I help you?

Thank you. That was nice of you.

Could you repeat that please?

Repeat that please? Talk slower please. Wait a minute, I don't understand.

Let me repeat that.

I said, ____________________.

I can hear you.

To help generate this list ask student the following questions orally and type the up for a written exercise to hand out. If necessary, demonstrate or

have students role play the following scenes:

1. What do you say if you don't understand someone?
2. What do you say if you want someone to repeat something?
3. What do you say if you want someone to speak more slowly?
4. What do you say if someone talks too loudly?
5. What do you say if someone is impolite?
6. What do you say if someone doesn't understand you?

Have students in pairs or groups of three practice ordering and paying in a restaurant. Bring in real menus or create ones based on real prices in local restaurants that students might frequent. Have them practice ordering a breakfast, a lunch, and a dinner, alternating parts between the waiter/waitress and the customers. Ask the waiters each time to write up a bill and add up the prices. These bills can be turned in for correction. Ask each group to present one scene to the rest of the class.

Other activities could include: developing a written dialogue and role-play for a family that is overcharged for their supper; or developing other written exercises for calculating the expense of meals. One exercise could be asking each student to write down their order from a menu and to add up the price of that meal. Then ask students to calculate the tips.

ONE SAMPLE MENU

American

Dinners with soup and salad

Steak Dinner	$5.50
Broiled Fish	4.30
Spaghetti	3.95
Beef Stew	4.25
Chicken	4.50

Sandwiches

Hamburger	$2.25
Cheeseburger	2.75
Turkey	3.00
Tuna	2.75
Omelet	3.75
1 eggs/toast	2.50

Tossed Green Salad

Potato salad	.75
Soup of the day w/bread	2.00
Milk	.40
Beer	1.00
Coffee	.40
Tea	.30

Write down your order for lunch or dinner.

FOOD: PRICE: (Reprinted with the permission of

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CROWNPOINT INSTITUTE OF TECHNOLOGY

EDUCATIONAL GOALS

A.1 The student will have a healthy idea of self. He/she will trust his/her own judgement, not fear decision-making nor the responsibility for the results of personal decisions. The student will generally feel good about him/herself.

A.2 The student will use mathematical knowledge and skills to solve common practical problems.

A.3 The student will appreciate writing as means of self-expression, as a creative activity, and as a means of sharing ideas with others. The student will communicate well in writing for personal needs and in writing for school needs. Originality, organization and style will be evident.

A.4 The student will realize the help reading offers in improving vocabulary, speaking and writing abilities.

A.5 The student will recognize the intentions of the author and the purpose of the writing. The student will recognize writing that encourage on point of view over any other or that does not make logical sense. The student will tell the difference between fact, opinion, guesses, and statements of feelings.

A.6 The student will apply health principles to daily life. Good habits of nutrition will be developed.

A.7 The student will understand the ways individuals, groups of people, and nations depend upon one another to maintain the society. He/she will understand the ways ideas, needs, and values are communicated among neighborhoods, cities, states, and nations and the development, structure, and functions of social groups such as family, school, and community. He/she will know about trade and transportation.

A.8 The student will know that groups of people accept different ways of living. He/she will understand that because of the influences of other groups, people may change their ideas and ways of living.

CURRICULUM DESIGN

B.1 SUBSTANCE

a. Philosophy

Though the contributions of other curriculum theories are appreciated, CIT believes that vocational education is a whole experience addressing the cognitive, effective, and psychomotor needs of students. Therefore, force for both the purposes of individual development and the needs of society (the community).

b. Definition

Curriculum is a plan for instructed learning within the perspective of basic education. It is an organized series of experiences leading to acquisition and application of facts, concepts and values.

c. Purpose

The prime purpose of curriculum is to reduce confusion and eliminate obsolescence. The end product of this is to assist youth and adults in the development of problem solving behaviors, maintenance of social and academic survival skills, and to select what is meaningful and useful in their lives.

B.2 STRUCTURE

a. Goals

Goals are broad far-ranging aims which may or may not be measured. Goals are a part of the design because they indicate and/or infer the direction of the curriculum. a curriculum without goals implies purposelessness.

a. Objectives

Informational objectives will be utilized to define specific tasks in each disciplinary area. The objectives will define the audience (who) and the required performance(s)

c. Organization

As a result of the target orientation of the goals and objectives, the curriculum will be spirally organized progressively and sequentially at appropriate levels according to the structure of content and a taxonomy of predetermined tasks.

d. Methodology

The curriculum design will indicate the defined means by which learner outcomes will be produced. How curriculum is presented is a important as what is taught, because various approaches (methods) affect results.

e. Evaluation

Evaluation will cover three major functions as follows:

1. The creation, administration , and scoring of objective-based, criterion referenced tests reflecting CIT's curriculum, and administration and scoring of norm-referenced documents.
2. Measuring the degree of attainment of various projects through their state objectives, methods, media, and

materials,;and

3. Assessment of organizational and learner outcomes which will affect decisions to implement or recycle programs and subparts of instructional components.

B.3 STYLE

a. Emphasis

The emphasis of the CIT curriculum will be upon results. Student mastery and productivity will be the benchmark of progress insofar as the thrust of this concept remains within the knowledge, attitudinal, and physical development areas.

Students will simply be expected to apply what they know, feel, and do to both academic and life-oriented situations.

b. Time On Task

In order to honor the commitment to the basic curriculum, time will be given to allow for student attainment of designated in all levels and courses.

c. Curriculum Mapping

The linkage or hookup of the curriculum will be designed on a spiraling framework, so that elements of review, presentation of new items, and enrichment will be addressed on both a vertical and horizontal basis. Therefore, curriculum articulation will be enhanced through both the general structure of this design and what is considered to be accepted classroom practice.

d. Verification

To assure this implementation of the curriculum, teachers will be required to maintain a notation system of verification through language assessment and other testing measurements.

e. Baseline

It is the intent of CIT to exceed standards in the degree of curriculum delivery services. The minimum will not be considered the maximum in any case, because program will be interwoven into context. However, in order to avoid undue curriculum dilution, proliferation, variance, and decentralization, CIT will insist upon the following.

1. Course content will be related to course titles, so that processes and content will remain relevant to the needs of students.

OBJECTIVE

Performance objectives are written for the content area and the objective may involve review, new material or both.

METHODOLOGY

(Procedure) The procedure describes briefly the way the lesson will be taught and included in these procedures are:

1. The discussion class
2. The dictation class
3. The laboratory class
4. The tutoring session
5. The demonstration
6. Independent Study
7. Programmed instruction
8. Reading
9. Motion pictures, television, Filmstrips, video, etc.
10. Simulation Activities
11. Role Playing

12. Lecture

MATERIALS

The materials are the items used to teach the lesson including texts and page numbers, workbooks, worksheet, films, equipment, supplies, etc.

EVALUATION

The evaluation states the means by which the instructor will know whether the students have achieved the objective being taught. Teacher constructed criterion-referenced tests, textbook test, oral responses to questioning, observation using quality point rating scales, etc.

CARPENTRY CURRICULUM

TABLE OF CONTENTS

Introduction

Course Objective

Student Orientation

Field Trip
  Unit 1 - Building materials
  Unit 2 - Hand Tools
  Unit 3 - Power Tools
  Unit 4 - Leveling Instruments
  Unit 5 - Plans, Specifications, Codes
  Unit 6 - Footings and Foundations
  Unit 7 - Floor Framing
  Unit 8 - Wall and Ceiling Framing
  Unit 9 -
  Unit 10 -
  Unit 11 -
  Unit 12 -
  Unit 13 -
  Unit 14 -
  Unit 15 -
  Unit 16 -
  Unit 17 -
  Unit 18 -
  Unit 19 -
  Unit 20 -
  Unit 21 -
  Unit 22 -
  Unit 23 -
  Unit 24 -
  Unit 25 -

APPENDIX

A. Outline structure guide (in English and Navajo)

B. The function of tools described in Navajo

C. Sample of weekly activities in English and Navajo

CIT CARPENTRY PROGRAM

Course Objective

Construction Trades - Carpentry: Prepares students for jobs currently existing in the residential construction trades. Students receive classroom and hands on instruction identification, proper handling, care and maintenance of trade tools and equipment; fundamental processes and techniques of the trade; applicable codes and safety practices; and blueprint reading and job estimation techniques.

Phase I

Phase I is the cognitive phase which will prepare the student for the hands-on-training that follows. During this phase the student will learn:

1. Job safety and first aid.
2. Blueprint reading (light frame residential commercial structures).
3. Mathematics (related to the construction trades).
4. Care for and the proper use of hand tools, powered hand tools, and shop machines.
5. Site layout and the builder's level/transit.
6. Construction materials.
7. Hot House type structures.

Phase II will cover lab and experiences in the areas of:

1. Foundation and form work
2. Floor framing
3. Wall framing
4. Roof framing
5. Exterior finish
6. Insulation
7. Introduction to fine woodworking

Phase III will cover lab and on-the-site experiences in the areas of:

1. Exterior finish
2. Field experiences

Phase IV will be devoted to on-the-site construction projects.

1. Is a certification provided at the end of training activity?

   _______________ Yes _______________ No

2. Total time required for such certification: _____ months or total

   Hours.

NEW STUDENT ORIENTATION

individually done

interview - develop report

safety procedures

motivation is stressed - writes positive reinforcement statements on returned work

introduction to the Carpentry Class - all classroom material is assigned, calculator issued

Discuss how books are going to be used

1. Text: Modern Carpentry

   Written assignments: An outline quiz on comprehension

2. Workbook - corresponding units are due at the end of the week

3. Building Trades blueprint reading

   Cover one chapter monthly

   Monthly competence test

4. Practical

   Math skills are importance - through a diagram

   32 5/8 16 1/4 22 2/16 1' 3"

5. Related mathematics for carpentry procedures

   Grading system

   40 % academic

   40 % skill

   10 % attendance

   10 % appraisal

COURSE DESCRIPTION

This program includes designing and sketching for shop,basic bench metal, woodworking with hand tools, and woodworking with power tools. Trainees will be required to construct various projects to master skills.

GOALS

Trainees will be able to perform various manual skills and concepts in areas outlined above. They will also demonstrate their knowledge of the subject matter by taking test on each unit and passing with at least a 70% proficiency.

OBJECTIVE

To provide students with an opportunity to develop skills and dexterity of hand/eye coordination. Besides these obvious manual skills the trainees will also be presented with a challenge to excellence and pride as an outlook on the world of work. Through this the students will also get a broader understanding of out technological society.

SKILLS

The trainees will be able to:

1. Read and use measuring devices.
2. Read and draw simple working drawings.
3. Figure a bill of materials.
4. Design own project.
5. Work safely with metal.
6. Use layout tools for metal.
7. Effectively use metal bench tools.
8. Cut and tap
9. Use metal fasteners
10. Bend and twist metal.

11. Drill metal.
12. Work safely with hand woodworking tools.
13. Cut straight and curved lines.
14. Smooth wood.
15. Plane square.
16. Bore and drill holes.
17. Fasten and assemble parts.
18. Stain and varnish projects.
19. Work safely with power woodworking tools.
20. Work effectively with power tools.

METHODS/MATERIALS

Methods:

- Lecture
- Demonstrations
- Discussions
- Assignments
- Research

Materials:

- Films
- Worksheets
- Filmstrips
- Patterns
- Flip charts

EVALUATION METHODS

- Individual Assignments
- Quizzes
- Unit Test

Projects Evaluation

CARPENTRY GENERAL OBJECTIVES

1. The learner will demonstrate the use of related measuring devices.
    a. The learner will demonstrate the use of the standard rule in increments up to the eights.
    b. The learner will demonstrate the basic use of the squares.
    c. The learner will demonstrate the use of the dividers, compass and protractor as measuring devices.

2. The learner will make a minimum of one small project with hand tools only.
    a. The learner will make a plan and bill of materials of project to be made, with the help of the instructor.
    b. The learner will construct the object using the appropriate handtools, with the help of the instructor.
    c. The learner will apply an appropriate finish to the object, with the help for the instructor.
3. The learner will identify 40 to 50 hand tools.
    a. Their learner will visually identify 40 to 50 hand tools.
    b. The learner will orally identify the specific use of 40-50 hand tools.
    c. The learner will correctly spell the names of 40-50 hand tools.
4. The learner will square a board using a saw square and plane.
    a. The learner will measure and mark a board square with the use of one of the squares.
    b. The learner will cut the same board to size using both the rip and crosscut hand saws.
    c. The learner will plane the same board to given size and square using the proper hand planes.

5. The learner will describe how a project is made.
    a. The learner will explain the design and drawing phase of project planning.
    b. The learner will explain the basic steps of constructing a project, and why certain logical sequences must be followed.
    c. The learner will explain how various finishes are applied to the project.
6. The learner will recognize the difference between hardwoods and softwoods.
    a. The learner will visually identify whether a board is softwood or hardwood.
    b. The learner will explain the difference between coniferous and deciduous trees.
7. The learner will apply theory to practical experience, such as the proper use of the table saw.
    a. The learner will do required reading assignments on various aspects of woodworking, and then apply this knowledge in the production of an object as the need arises.
    b. The learner will view required filmstrips on various aspects of woodworking, and then apply this knowledge in the production of an object as the needs arises.
    c. The learner will observe various live demonstrations given by the instructor, and then apply this knowledge in the production of an object as the need arises.
8. The learner will develop a skill of recognizing quality and good design in manufactured products.
    a. The learner will understand what constitutes good design features in wood products.

- b. The learner will understand what constitutes good construction in wood products.
- c. Their learner will understand the good and bad points of materials used in the construction of wood products.

9. The learner will demonstrate the ability to follow all safety rules.
    - a. The learner will study and successfully pass a written safety test for each machine he/she will be using the lab.
    - b. The learner will take a practical safety test for each machine he/she will use in the lab, under the direct evaluation of the instructor.
    - c. the learner will be sufficiently penalized for any failures in following prescribe safety rules in the lab.
10. The learner will keep all areas of the laboratory free from safety hazards.
    - a. The learner will keep all areas of the laboratory free from safety hazards.
    - b. The learner will report any worn, broken or otherwise unsafe tools or machines to the instructor.
    - c. The learner will assist the instructor in reminding fellow students of the safety rules, especially the proper use of the eye protection.
11. The learner will report all injuries to the instructor as soon as possible.
    - a. The learner will understand the importance of time in treating serious injuries.
    - b. The learner will know the proper procedure that will be followed in the lab in case of a serious injury.
    - c. The learner will understand the importance of informing the

instructor even in cases of minor injuries, to prevent infection.

12. The learner will wear proper eye and clothing protection.
    a. The learner will always were eye protection whenever machinery is being used in the lab.
    b. The learner will wear the lab apron whenever he/she is working in the lab.
13. The learner will list safety rules for both power and hand tools.
14. The learner will recognize the potential danger of using power tools.
    a. The learner will know the specific dangers in using each of the power tools.
    b. The learner will view several safety filmstrips on each power tool.
    c. The learner will view several safety films which portray the potential safety hazards in working with power tools.
15. The learner will strengthen his/her background "readiness" information so that he/she may be better equipped to identify career interest and qualify for advanced training.
    a. The learner will periodically, research various career interests for personal growth.
    b. The learner will be shown various films dealing with occupational opportunities.
    c. The learner will be given opportunities to discuss careers with classmates, with instructor guidance and input.
16. The learner will demonstrate an awareness of his/her occupational opportunities.
    a. The learner will be guided in matching interests with possible occupations.
    b. The learner will be shown various films dealing with occupational opportunities.

   - c. The learner will be given opportunities to discuss careers with classmates, with instructor guidance and input.

17. The learner will demonstrate an understanding of the lumber production processes.
    - a. The learner will demonstrate an understanding of the lumber production processes.
    - b. The learner will list the various occupations in the lumber industry.
    - c. The learner will visit, if possible, a working lumber mill on a field trip.

18. The learner will define careers in woodworking and related fields.
    - a. The learner will list 30 careers or related fields.
    - b. The learner will describe, in detail, 10 woodworking careers including job description, working condition, salary, etc.
    - c. The learner will, with the help of the instructor and/or the counselors, obtain information on three careers which most interest them in the woodworking area.

19. The learner will demonstrate an understanding of the importance of being on time and being dependable.
    - a. The learner will come to class on time.
    - b. The learner will perform his/her work in lab in a fashion of cooperation and courtesy.

20. The learner will demonstrate the importance of being properly groomed at all time, especially for interviews.
    - a. The learner will be expected to be reasonably clean and groomed during class; and put him/herself in order at the end of a lab day.

   b. The learner will participate in at least one mock interview during the year to prepare him/her for future job hunting.

21. The learner will successfully write a resume.
    a. The learner will learn the essential parts of a good resume.
    b. The learner will put together a personal resume.
    c. The learner will learn the importance of a resume and its use in applying for a job.

22. The learner will demonstrate desirable working attitudes, working relations and a sense of responsibility.
    a. The learner will work in harmony with his/her fellow students.
    b. The learner will learn acceptable ways of expressing dissatisfaction and conflicts in work relationships and working conditions.
    c. The learner will develop a sense of responsibility concerning his own property and that of others.

23. The learner will display a feeling of pride in the ability to do useful tasks and to assume the responsibility for the care and use of property.
    a. The learner will strive to do his/her best on each assignment/project, and will attempt to improve his/her skills as time passes.
    b. The learner will perform each required or choose task in a manner that would display skill and pride of work.
    c. The learner will respect other work, and try to keep the lab and the tools in good condition.

24. The learner will define the value of woodworking during leisure time.
    a. The learner will understand the benefits of having a constructive hobby, and is relation to stress.

    b. The learner will discuss the possibilities of having woodworking as a hobby, and its advantages.

    c. The learner will know the usefulness of being a well-rounded handyman in future life.

25. The learner will practice good personal hygiene.

26. The learner will display self-esteem and pride in accomplishments.

    a. The learner, through the production on objects, will develop a sense of satisfaction in work completed.

    b. The learner will strive to produce projects that others will be please with and will foster respect for their ability.

    c. The learner will try to complement other's work, and so build other's self-esteem.

27. The learner will use time efficiently.

    a. The learner will be in class as much as is possible, in order to take full advantage of the instruction and the facilities of the lab.

    b. The learner will use lab time as best as their skill level will allow them.

    c. The learner will work with others, and so make the lab a pleasant place to work.

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CARPENTRY

Major Competency Areas

Directions: Evaluate the Trainee using the rating scale below the check the appropriate number to indicate the degree of competency. the numerical ratings of 4,3,2, and 1 are intended to represent the traditional school grading system of A,B,B, and D. The descriptions associated with each of the tasks listed below.

*Rating Scale: 4 - Skilled--can work independently with no supervision.
3 - Moderately Skilled--can perform job completely with limited supervision.
2 - Limited Skill-requires instruction and close supervision.
1 - No Exposures--no experience or knowledge in this area.

4 3 2 1 0

Safety
Lumber Identification
Hand Tools
Machine Woodworking Tools
Blueprint Reading
Site Preparation
Site Layout
Floor and Sill Framing
Roof Framing
Wall and Partition Framing
Roofing Materials and Application
Exterior Wall Coverings and Trim

Thermal Insulation
Dry Wall
Stair Construction
Door Hanging and Trim
Paneling
Flooring
Builders Level
Drawing Plans
Estimating Materials
Remodeling
Form Work
Solar Application
interior Remodeling
Resume Writing
Applying For a Job Date:

Instructor: ____________________
Total Hrs.: ____________________
Hrs. Completed: ____________________

PLANNING SESSION

WHO : Carpentry Instructor, ESL Instructor, ESL Instructional Aide

WHEN : Friday afternoons 1-3 pm

WHERE: Carpentry Classroom

WHAT:

- Review the text
- Discuss OJT (on the Job Training Project)
- Design a lesson plan for the up coming week
- Discuss the translation of the carpentry text and contents
- Vocabulary List
- Close exercise
- Prepare a quiz

PREPARATION FOR OJT TRIP

Students assigned on project

1. 6.
2. 7.
3. 8.
4. 9.
5. 10.

Date: Location

Objective: The purpose of OJT trip and skills to be applied are explained

Brain storming activity as the class prepares for he trip

List Materials:

Two students assigned to record all information written on the board. They assign other students to gather materials and equipment

examples: get water power tools

extension cords skill saw etc.

Request for transportation (Instructor)

-week in advance

-see weekly lesson job

LESSON ON SITE

Title: On the Job Training

Location: Attach map if necessary

Plans: On site discussion by instructor ESL Instructional Aide

- Highlights the discussion and clarifies any concepts in Navajo

* Time given to ask questions before project proceeds for Clarification of objectives

- One student selected as foreman
- The foreman
    - is given responsibility to develop supervisory skills
    - make sure measurements are
    - makes sure work progresses
    - makes sure everyone is working
- the rest of the class pairs up
- assignments are given

Carpentry Instructor, ESL Instructor, and ESL Aide Supervisor

30 minute lunch break - Resume project after lunch break
3:00 pm Group session to review and evaluate progress using the test as reference. Time for questions, answers and suggestions relating to actual job situations.

BUILDING MATERIALS

Unit 1

SPECIFIC OBJECTIVES

1. The learner will be able to describe with 100% accuracy hardwood and softwood classifications and the types of construction materials used including:
   - a. Sawed lumber
   - b. Plywood
   - c. Particle board, hardboard and wafer board
   - d. Wood and nonwood materials for shingles and flooring
   - e. Steel and aluminum
   - f. Concrete
   - g. Adhesives and sealers
   - h. Gypsum board and fibrous manufactured ceiling tiles
2. The learner will able able to define moisture content, M.C. and E.M.C.
3. The learner will be able to recognize and name the common defects in lumber including:
   - a. Knots
   - b. Splits and checks
   - c. Checks
   - d. Shakes
   - e. Pitch pockets
   - f. Honeycombing
   - g. Wane
   - h. Blue stain
   - i. Decay
   - j. Holes

    k. Warp

4. The learner will define lumber gradine terms and product classification.
5. The learner will calculate lumber sizes according to established industry standards.
6. The learner will explain plywood, hardwood, particle, wafer & oriented strand board grades and uses.
7. The learner will be able to identify wood treatments and the classes of wood preservatives.
8. The learner will be able to identify the proper means of handling and storing building materials.
9. The learner will be able to work effectively with non-wood materials including:
    a. Gypsum lath
    b. Wallboard and sheathing
    c. Insulation boards and blankets
    d. Shingles of asphalt, metal and fiber glass
    e. Metal flashing materials
    f. Caulking Materials
    g. Resilient flooring materials and carpeting
    h. Metal studs, fasteners, adhesives
10. The learner will be able to identify nail types and sizing units.
11. The learner will be able to list and demonstrate the two methods for drying lumber.
12. The learner will be able to write a material list for project use.
13. The learner will be able to compute board feet and cost.

VOCABULARY

1. Open Grain Woods	OPEN-GRAIN WOOD: Woods with large pores, such as oak, ash, chestnut, and walnut.
2. Quarter-Sawed	QUARTER-SAWED: Lumber that has been cut at about a 90 deg. angle to the angular growth rings.
3. Fiber Saturation Point	FIBER SATURATION POINT: The stage in the drying or wetting of wood at which the cell walls are saturated and the cell cavities are free from water. It is assumed to be 30 percent moisture content, based on oven dry weight and is the point below which shrinkage occurs.
4. Factory Lumber	FACTORY AND SHOP LUMBER: Lumber intended to be cut up for use in further manufacture. It is graded on the basis of the percentage of the area which will produce a limited number of cuttings of a specified, or a given minimum, size, and quality.

QUIZ FOR COMPREHENSION

OUTSIDE ASSIGNMENT

Field trip to local building supply center.

BUILDING MATERIALS

Unit 1

1. The natural cement that holds wood cells together is called ________________________.

2. New wood cells are formed in the ________________________ layer.

3. Which of the following kinds of wood are classified as a hard wood? Hemlock, redwood, willow and spruce.

4. When a softwood log is cut so the angular rings form an angle greater than 45 deg. with the surface of the boards, the lumber is called ________________________.

5. What is the moisture content of board if a test sample that originally weighted 11.5 oz. was found to weight 10 oz. after oven drying? ________________________.

6. The fiber saturation point is about ______________ M.C. for nearly all kinds of wood.

7. The letters E.M.C. are an abbreviation for the term ______________ moisture content.

8. A large knot is defined as one that is over ________________________ in. in size.

9. Where should a plywood panel marked "Exposure 1" be used? __________ ________________________.

10. The best grade of finish softwood lumber is ________________________.

11. The best available grade of hardwood lumber is ________________________.

12. How many board feet of lumber are contained in a pile of 24 pieces of 2" x 4" x8'? ________________________.

HAND TOOLS

Unit 2

OBJECTIVES

1. The learner will be able to list the most common hand tools essential to every aspect of carpentry work including measuring and layout tools, squares and saws.
2. The learner will be able to write specifically with a use, selection and care for each tool.
3. The learner will be able to select the proper hand tool for a given job.
4. The learner will be able to identify the main parts of each major hand tool.
5. The learner will understand how to fasten parts together including nails, screws, bolt and other types of connectors.
6. The learner will be able to explain the appropriate methods of tool maintenance and storage and will provide practical solutions for transportation and storage.
7. The learner will be able to demonstrate the ability to use tools safely and according to the recommended use.
8. The learner will be able to list twelve general safely rules in reference to hand tools.

VOCABULARY

1. Flexible Back
2. Expansive
3. All Hard
4. Hazard
5. Prevention
6. Sterile
7. Standard Specification
8. Volatile
9. Class A Fire
10. Class C Fire

QUIZ FOR COMPREHENSION

OUTSIDE ASSIGNMENT

Field trip to purchase hand tools at local building supply center.

HAND TOOLS

Unit 2

QUIZ FOR COMPREHENSION

1. A standard folding wood rule is ___________ ft. long.
2. The blade of a framing square is 24 in. long. How long is the tongues (other leg)?
   a. 10 in.
   b. 12 in.
   c. 16 in.
   d. 20 in.
3. When checking structural members to see if they are horizontal or vertical, what tool should be used? ____________________________.
4. A 10 point saw will have 12 teeth per inch. True or False?
5. A backsaw is used for fine work. Its teeth are usually spaced:
   a. 8 per inch.
   b. 8-10 per inch.
   c. 12-14 per inch.
   d. 14-15 per inch.
6. The level of a block blade is turned ______________________ (down up).
7. An auger bit with the number 10 stamped on the tang or shank would bore a hold ________________ in. in diameter.
8. Never strike a wood chisel with a mallet. True or False?
9. The size of a claw hammer is determined by the:
   a. Length of the handle.
   b. Length of the head.
   c. Weight of entire hammer.
   d. Weight of the hand.

10. Large screws can be driven with a screwdriver bit mounted in a _____ ____?

11. Spurs of an auger bit are filed on the ______________ (inside, outside).

12. The operation of filing off the points of saw teeth until they are all level is called ___________________________.

HAND TOOLS

Unit 2

QUIZ FOR COMPREHENSION

1. A standard folding wood rule is 6 ft. long.
2. The blade of a framing square is 24 in long. How long is the tongue (other leg)? C. 16 in.
   - a. 10 in.
   - b. 12 in.
   - c. 16 in.
   - d. 20 in.
3. When checking structural members to see if they are horizontal or vertical, what tools should be used? Level
4. A 10 point saw will have 12 teeth per inch. True or false? False
5. A backsaw is used for fine work. Its teeth are usually spaced: D. 14-16 per inch.
   - a. 8 per inch.
   - b. 8-10 per inch.
   - c. 12-14 per inch.
   - d. 14-16 per inch.
6. The level of a block plane blade is turned up (down, up).
7. An auger bit with the number 10 stamped on the tang or shank would bore a hold 5/8 in. in diameter.
8. Never strike a wood chisel with a mallet. True or false? False
9. The size of a claw hammer is determined by: The D/ Weight of the head.
   - a. Length of the handle.
   - b. Length of the head.

   c. Weight of entire hammer.

   d. Weight of the head.

10. Large screws can be driven with a screwdriver bit mounted in a brace.

11. Spurs of an auger bit are filed on the inside (inside, outside).

12. The operation of filing off the points of saw teeth until they are all level is called jointing.

POWER TOOLS

Unit 3

OBJECTIVES

1. The learner will able to list the most common power tools including portable and stationary.
2. The learner will be able to recognize that when proper tools are used correctly high levels of accuracy are maintained.
3. The learner will be able to explain the function and operation of the power tools.
4. The learner will be able to demonstrate the proper use of each power tool according to safety procedures and will be aware of electrical safety and shock protection.
5. The learner will be able to specifically list with accuracy like safety for portable circular saws, saber saws, portable drills, power planes, portable rulers, sanders, staplers, mailers, radial arm saws, table saws jointers and special saws.
6. The learner will be able to maintain and sharpen tools appropriately.
7. The learner will be able to verbally discuss and readily identify

VOCABULARY

1. Accomplished
2. Supplemented
3. (GFCE)
4. Distracted
5. Automatically
6. Excessive
7. Potential
8. Grounding
9. adjustments
10. Re-established

QUIZ ON COMPREHENSION

OUTSIDE ASSIGNMENT

Demonstrate on site O.J.T.

POWER TOOLS

Ac-com-plished: Completed; finished. (Lat. Complete)

Sup-ple-mented: Something added to compete a thing.

Dis-tracted: To cause to turn away from original attention.

haz-ard-ous: Marked by danger.

Auto-mati-cally: Self moving (GK. automatos, self acting)

Ex-xes-sive: Exceeding what is normal.

Po-ten-tial: Capable of being but not yet in existence.

Grounding: The position of an electric circuit that is at zero potential with respect to the earth.

Ad-jut-ments: The act of making fir or comfortable.

Re-established: To make firm or secure again.

FILL IN THE BLANKS

With power tools heavy sawing, planing and boring can be accomplished with far less human energy.

This should be supplemented with woodworking textbooks and reference books devoted to power tool operation.

Make all adjustments before turning on the power when operating a power tool, do not allow yourself to be distracted.

Overloading is hazardous to the operator and will likely damage the tool or work.

These are safety devices which will automatically turn the switch to the "off" position in case of power failure.

This feature is important since personal injury or damage to the equipment could result if power is re-established.

Make sure that the conducting wire is large enough to prevent excessive voltage drop.

Electrical shock is one of the potential hazards of working with power tools.

Always be sure that proper grounding is provided.

ASSIGNMENT

Make sentences of the vocabulary list.

POWER TOOLS

Unit 3

QUIZ FOR COMPREHENSION

1. What is a ground fault interrupter and why should it be used in carpentry? ______________________________.

2. The size of a portable circular saw is determined by the ______________________________.

3. For general purpose work, a saber saw blade should have about ______ teeth per in.

4. When the base of the saber saw rests on a horizontal surface, the blade cuts on the ______________ (up, down) stroke.

5. When drilling deep holes do not withdraw a twist drill until the hole is completed. True or False?

6. The depth of cut of a power plane is adjusted by raising or lowering the______________________________.

7. A standard router bit is held in a ______________ type chuck.

8. The size of a belt sander is determined by the ____________________.

9. To adjust the depth of cut of a radial arm saw, the ______________ is raised or lowered.

10. When crosscutting with the radial arm saw, the blade is ____________ (pushed away, pulled toward) the operator.

11. For regular work, the ____________ of the jointer should be perfectly aligned with the knife edges at their highest point.

12. What cuts can be performed with a frame and trim saw? ______________.

POWER TOOLS

Unit 3

QUIZ FOR COMPREHENSION

1. What is a ground fault interrupter and why should it be used in carpentry?

   A device which turns off electrical power if a wire in a device senses the ground and trips at 5 milliamperes.

2. The size of a portable circular saw is determined by the blade diameter.
3. For general purpose work, a saber saw blade should have about 10 teeth per in.
4. When the base of the saber saw rests on a horizontal surface, the blade cuts on the up (up, down) stroke.
5. When drilling deep holes do not withdraw a twist drill until the hole is completed. True or False? False
6. The depth of cut of a power plane is adjusted by raising or lowering the front shoe.
7. A standard router bit is held in a collet type chuck.
8. The size of a belt sander is determined by the belt width.
9. To adjust the depth of cut of a radial arm saw, the overhead arm is raised or lowered.
10. When crosscutting with the radial arm saw, the blade is pulled toward (pushed away, pulled toward) the operator.
11. For regular work, the outfeed table of the jointer should be perfectly aligned with the knife edges at their highest point.
12. What cuts can be performed with a frame and trim saw? All except rip cuts.

LEVELING INSTRUMENTS

Unit 4

OBJECTIVES

1. The learner will be able to research the community requirements for building and local codes.

2. The learner will be able to explain the operation of the builder's level and level transit.

3. The learner will be able to use measuring tapes accurately for finding building lines.

4. The learner will be able to demonstrate the proper set up sighting and leveling procedures.

5. The learner will be able to measure and lay out angles using leveling equipment.

6. The learner will be able to measure and lay out angles using leveling equipment.

7. The learner will understand the care of leveling instruments as special precautions are necessary.

8. The learner will be able to read the vernier scale.

9. The learner will be able to demonstrate the procedures for staking a house, finding grade level setting foot slates and running straight lines with transit.

10. The learner will be able to read a rule to the nearest one-sixteenth of an inch.

VOCABULARY

1. Line of sight
2. Station Mark
3. Vertical Angle
4. Lay-out
5. Plumb
6. Vertical Angle
7. Horizontal Angle
8. Perpendicular
9. Compliance
10. Aligning.

QUIZ FOR COMPREHENSION

OUTSIDE ASSIGNMENT

Drawing dimensions for an addition of an actual house for O.J.T.

LEVELING INSTRUMENTS

Unit 4

QUIZ FOR COMPREHENSION

1. What are building lines? ______________________________

2. Explain how to check perpendicularity of intersecting lines. ______

____.

3. In theuse of leveling instruments, the ______________________ replaces the chalk line and straightedge.

4. The builders' level consists of a telescope assembly that is mounted on a ______________________ base.

5. For surveying work, measuring tape with graduations reading in feet and ______________________ is usually selected.

6. The most important operation in setting up a builders' level or level-transit is the ______________________.

7. When sighting through the telescope, you should adjust the ______________________ until the image is sharp and clear.

8. When setting grade stakes for a building footings, the instrument should be set up in a ______________________ location.

9. To position a leveling instrument directly over a given point, a ______________ ______________ is used.

10. A circle is divided into degrees, ______________, and __________.

LEVELING INSTRUMENTS

Unit 4

QUIZ FOR COMPREHENSION

1. What are building lines?

   Building lines are the lines marking where the walls of a structure are to be on a building site.

2. Explain how to check perpendicularity of intersecting lines?

   See Page 81, fig. 4-4.

3. In the use of leveling instruments, the line of sight replaces the chalk line and straightedge.

4. The builders' level consists of a telescope assembly that is mounted on a circular base.

5. For surveying work, a measuring tape with graduations reading in feet and decimal parts of an inch is usually selected.

6. The most important operation in setting up a builders' level or level-transit is the leveling.

7. When sighting through the telescope, you should adjust the focusing knob until the image is sharp and clear.

8. When setting grade stakes for a building footings, the instrument should be set up in a central location.

9. To position a leveling instrument directly over a given point, a plumbing bobis used.

10. A circle is divided into degrees, minutes and seconds.

PLANS, SPECIFICATIONS, CODES

Unit 5

OBJECTIVES

Students will be able to:

1. The learner will be able to understand that a good plan and a well defined contract are essential.
2. The learner will be able to identify the elements commonly included in a set of house plans.
3. The learner will be able to sketch drawings for a drawing sheet, drawer accurately to scale.
4. The learner will be able to demonstrate the use of scale in architectural drawings.
5. The learner will be able to determine floor levels, grade lines, window and door heights, roof slopes and the kinds of materials used on wall and roof surfaces.
6. The learner will be able to explain the use of building specifications.
7. The learner will be able to summarize the concept of modular construction.
8. The learner will be able to describe the application of building codes, standards and permits.
9. The learner will be able to identify the mine types of lines in the alphabet of lines.
10. The learner will be able to draw symbols which represent materials and items including concrete double hung window, interior door, refrigerator, wall bar along, three way switch, range outlet and wall fixture outlet.

VOCABULARY

1. Contract
2. Visualize
3. Relationship
4. Concealed Features
5. Complicated
6. Sectional Views
7. Assemblies
8. Quantity
9. Specified
10. symbols
11. Shortcuts

QUIZ FOR COMPREHENSION

OUTSIDE ASSIGNMENT

1. Drawing construction plans and estimating for library office.
2. Drawing construction plans and estimation for a drafting office.
3. Drawing construction plans for storage sheds.

PLANS, SPECIFICATIONS, CODES

Unit 5

QUIZ FOR COMPREHENSION

1. A set of house plans usually includes what drawings? ______________.

2. Residential plan views are usually drawn to a scale of ____________.
inc. = ____________ ft. ____________ in.

3. Floor plans show the __________ and outline of the building and its rooms.

4. The plot plan show the ____.

5. Elevation drawings show the ____________ walls of the __________ structure.

6. A section view shows how a ______________________of a structure looks when ____.

7. Dimension lines are __________________ lines with the size being ________________ placed the line near the _______________________.

8. Draw symbols which represent these materials and items:
   - a. Concrete
   - b. Double hung window
   - c. Interior door
   - d. Refrigerator
   - e. Wall lavatory
   - f. Three-way switch
   - g. Range outlet
   - h. Range outlet

9. To obtain a plan dimension not shown, an ________________ scale may be used.

10. Working drawings (plans) provide much information required by the builder. Supplementary information is supplied by ________________.

11. The modular construction concept is based on the use of a standard gird divided into ______________ in. squares.

12. A building code covers all important aspects of the erection of a building. True or False?

PLANS, SPECIFICATIONS, CODES

Unit 5

QUIZ FOR COMPREHENSION

1. A set of house plans usually includes what drawings?

Plot plan, foundation or basement plan, floor plan, elevation drawings, drawings of electrical.

2. Residential plan views are usually drawn to a scale of 1/4" in. = 1'ft. o" in.

3. Floor plans show the size and outline of the building site.

4. The plot plan shows the location of structure on building site.

5. Elevation drawings show the outside walls of the structure.

6. A section view shows how a part of a structure looks when cut by a vertical plane.

7. Dimension lines are continuous lines with the size begin placed abovethe line near the center.

8. Draw symbols which represent these materials and items. see pgs. 107, 108, 109 and 100.

9. To obtain a plan dimension not shown, an architects scale may be used.

10. Working drawings (plans) provide much information required by the builder. Supplementary information is supplied by written specifications commonly called specs.

11. The modular construction concept is based on the use of a standard grid divided into 4in. squares.

12. A building code covers all important aspects of the erection of a building. True or False? **True**

UNIT FIVE

RETENTION AND COMPREHENSION

A. True/False

1. Residential plan views are generally drawn to 1/4 in. scale (1/4" = 1' -0"0. This means that for each 1/4 in. on the plan, the building dimension will be 1 yd. — 1. T_____ F_____

2. A set of house plans does not include the electrical drawings. — 2. T_____ F_____

3. Floor plans show the size and outline of the building and its room. — 3. T_____ F_____

4. Elevations drawings show the outside walls of the structure. — 4. T_____ F_____

B. Completion

5. A section view shows how a part of a structure looks when cut by a vertical ______________________________ .

6. Dimension lines are continuous lines with the sizes being placed __________ the line near the middle.

7. Write the name of the symbols. ____________________.

8. To obtain a plan dimension not shown, an __________________ scale may be used.

EVALUATION

Please write your opinion or comments on the following areas.

____

____ .

CARPENTRY - Comments:

Suggestions:

____.

MATH - Comments:

Suggestions:

____.

CAREER EDUCATION - Comments:

Suggestions:

____.

CABINET MAKING - Comments:

Suggestions:

____.

VOCABULARY AND CARPENTRY TERMS - Comments:

Suggestions:

SEGMENTED TURNING AN OLD TECHNIQUE

While exploring the art of woodturning we rediscovered an refined an old turning technique known as ______________________. This process involves gluing various shapes and colors of wood together then turning them to create lively, infinitely-variable designs. The method is time consuming and often complicated but worth it for the richness and diversity of designs it makes possible.

Whatever the shape, we usually being a bowl by drawing it full size on graph paper. We start with an elevation view including the segment pattern, then make a full size plan view of each segment band. This is s critical step because it allows us to refine the shape and plant the segment pattern in _______________ detail. We can then measure the various angles and sizes of each segment right off the drawing instead of puzzling it out mathematically. We've found that it's a lot simpler to measure in millimeters and centimeters when working at this scale.

The basic building block for our designs in segment with a __________ wedge shape. a few of our bowls are turned entirely of segmented sections. but most consist of a ______________ blank onto which we glue one or more segment bands that make up the desired pattern.

There are two basic ways to glue up the segments-single angle and multi-angle pattern. A single angle pattern, like a pie cut into equal slices, is made up of segments with the same angle, say 18 segments at 20. A multi-angle pattern alternates segments with different angles, say 12 segments at 20, and 12 segments at 10- spaced angles always add up 360.

Once all the segments are glued up, let the work dry overnight. we find that it's not necessary to clamp when laying up the segments, but we do clamp the layers of veneer or other hardwood laminates that may be part of the piece. We have never had a piece fly apart on the lathe.

The segmentation process can be a simple as or as complex as you of the entire process, it's a good idea to develop turning ___________ before plunging into segmentation work. You'll find, as you experiment with out techniques, that you'll discover new effects at the lathe that you just can't predict on paper.

1.	SEGMENTATION:	Division into segments.
2.	MINUTE:	Exceptionally small.
3.	TRUNCATED:	Having the apex cut off and replaced by a plane.
4.	BURL:	The strongly marked wood such an outgrowth (root) used as veneer.
5.	TECHNIQUES:	The systematic procedure by which a complex task is accomplished.

VOCABULARY BUILDING

Below are several words used in this unit. They are presented in the context of the sentences or phrases in which they occur. If you are unsure of their meaning and cannot define them from the context, look them up in the dictionary.

Spaces are provided for additional unfamiliar words from the article to add to your vocabulary.

1. In building construction, a good plan and a well define contract are important.

   Contract agreement.

2. A pictorial sketch is often needed so the customer can visualize what the complete job will look like.

   visualize picture; envision; imagine.

   Relationship reference, connection, association.

3. Elevations drawings are scaled so that all elements will appear in their true relationship.

4. A section drawing or view gives important information about size, materials, fastening, and support system as well as concealed features. Concealed out of sight, hidden.

   Features forms, figures, shape, frame, construction, etc.

5. A complicated structure may need many sectional views to show all the details of construction.

   Complicated compounded, involved.

   Sectional view The section shows how a part of the structure looks when cut by a vertical plan.

6. A materials list will include all of the materials and assembles needed to build the structure.

7. Another part of the materials list ,a the quantity needed, sizes of the rough openings, and descriptions. Sometimes the manufacture is specified.

8. The architect, uses symbols to represent materials and other items and certain approved shortcuts. Range symbols character representing an object; example: Outlet shortcuts A means of saving time.

9. S. Choice: ____.

10. S. Choice: ____.

WORKING DRAWINGS AND BLUEPRINTS

Sample Lesson I

Related Lesson: Unit 5 in Carpentry textbook Plans, Specifications Codes

Objectives

1.1 To explain the functions of working drawings and blueprints.

1.2 To explain the relationship between the owner and architect in developing working drawings.

1.3 To identify the symbols the symbols on a set of working drawings.

1.4 List four different blueprint making process.

TEXT: Building Trades Blueprint Reading 5th Edition

MATERIALS, EQUIPMENT, AND/OR TEACHING AIDS:

- Architects Scale
- Sheet of glass
- Blueprint paper
- Light
- Ammonia
- Mailing tube
- Wad of cotton
- House drawing on transparency
- Overhead projector
- Copy of working blueprint

Experimental and/or Project Activities

A. Class experiment in blueprinting. Supplies include a small sheet of glass, a tracing of any building subject, and some blueprint paper.

Procedure:
1. Fasten the tracing under the glass with masking tape.
2. Fasten the blueprint paper under the tracing with the light-senitive side up.
3. Expose the glass to a source of light.
4. (The students will experiment to determine the proper length of exposure.)
5. Remove the blueprint paper and place it in a large mailing tube with a was of cotton dipped in ammonia at one end of the tube.

Results: After a few minutes of exposure to the ammonia vapor, the paper should yield an excellent blue line print.

B. A field trip to a blueprint shop where the class will observe actual working drawings being fed into a blueprint machine.

LESSON OUTLINE:

- I. Working Drawings and Blueprints
  - A. Symbols, notations and dimensions on blueprints.
  - B. Blueprint reproduction and process.
  - C. Working drawings and building to completion
  - D. Terminology used with blueprints
  - E. The relationship between the owner and architect
- II. Working Drawings
  - A. A set drawings
    - 1. Floor plans
    - 2. Elevations drawing
    - 3. Section drawing
    - 4. Plot plan
    - 5. Detail drawing
- III. How Blueprints are made
  - A. Herschel method and the modern method reproduction.
  - B. The Van Dyke and Diazo process method.
    - 1. Negative intermediate process is the Van Dyke method.
    - 2. Black/Blue line blueprints are made using the Diazo method.
  - C. The moist and dry Diazo process.
  - D. The pros and cons for the Diazo method.

Vocabulary

blueprints

symbols

notations

dimensions

working drawings

floorplans

elevation drawings

section drawings

plot plan

detail drawing

Summary:

Everyone concerned with construciton should have some idea how the plans are created and how they are reproduced. A blueprint is a reproduction of a drawing which has been made on thin, translucent paper. Usually the prospective owner will meet with an architect to discuss the planning of the house. To meet the needs of the family, the working drawings, or architect's plans, consist of several different kinds of drawings usually assembled into a set.

REVIEW QUESTIONS

Fill in the blank spaces then check your answers. Answers are given in the appendix.

1. When what owner agrees to the architect's study sketches what is the next step? ______________________.
2. What are blueprints? ______________________.
3. When the architect draws the working drawings, what two qualities of paper should he use? ______________________

   ______________________.
4. What basic types of drawings make up an architect's set of working drawings?______________________.
5. Conventional blueprints are made on paper sensitized with iron salts. After exposure to light how are they developed? ______________________

   ______________________.
6. A conventional blueprint with bluelines on a white background requires a negative intermediate. What is it called? ______________________.

   ______________________.
7. Why is one Diazo process called the moist process?

____.

8. What is used to develop the image in the dry Diazo process?

____.

9. What are the colors of the lines obtained by using the two Diazo processes? ______________________________.

10. Why are blue or black line prints preferred by some builders? ______

____.

READING DRAWINGS

SAMPLE LESSON II

Related Lesson: Building and addition to house from drawings on field project.

Objectives:

* To identify perspective, isometric, and oblique pictorial drawings and demonstrate how they are used to show buildings and buildings parts.

* To explain the theory used to develop a three-view drawing and demonstrate how the views are related.

For Discussion:

* The use of perspective drawings used in the building section of newspapers.
* The use of oblique and Isometric projections.
* The concept of three-view drawing by likening it to viewing an object through the sides of a box, then opening the sides.
* The relationship among points shown in more than one view.
* Why plan views and elevation views must accurately related even tough they appear on different sheets in a set of working drawings.

Experimental and/or Project Activities

* Build bookcase from drawings
* Draw plans for segmented wood bowls; and construct and turn on lathe.
* Build house models from shoe boxes and paper card boards.
* Build a small wooden model house from a working blueprint at 1 inch = 1 foot.

VOCABULARY

Pictorial

Perspective

Periodicals

Isometric

Three dimensional

Parallel

Foreshortening

Gable roof

Oblique

Orthographic

MATERIALS, EQUIPMENT, AND/OR TEACHING AIDS:

- Newspaper
- Architects' scale
- Drawing of oblique projection on transparency
- An isometric drawing on transparency
- Shoe box
- Cardboard paper to build models
- Wood cut to scale size at 1 in. = 1 ft.

Lesson Outline

Reading Drawings

I. Pictorial drawings are helpful in learning how to read blueprints.

II. A perspective sketch of a house is like a picture.

III. Isometric drawing create a three dimensional effect.

  A. An isometric drawing is used to show details of construction.

IV. Oblique projections is useful in bringing about a three dimensional effect with minimum of effort.

  A. Oblique projection is used to give illusion of depth.

V. Orthographic Projection is a three view drawing used to visualized from a pictorial representation.

  A. Plan and elevation views are related by projection.

  B. The architect usually draws the floor plan first.

  C. The front elevation of a house is generally toward the street.

  D. Views are drawn on the basis of the position of the observer.

  E. The ability to relate points in different views is part of reading blueprints.

SUMMARY:

It is important that Carpentry students become familiar with the different types of pictorial drawing, perspective, isometric and oblique. They should understand how the three drawings are used to show buildings and buildings parts.

* to demonstrate how to relate points and planes from view to view.

TEXT:

Building Trades Blueprint Reading, 5th Edition.

FOOTINGS AND FOUNDATIONS

Unit 6

OBJECTIVES

1. The learner will be able to establish public relations and work closely with other trades people to carry out the total building plan.
2. The learner will be able to understand the preparation of the building site.
3. The learner will be able to lay out building lines and set up batter boards accurately.
4. The learner will be able to describe excaration procedures.
5. The learner will be able to explain footing requirements and the proper construction of footing forms, design and slab.
6. The learner will be able to define the terms, concrete, cement and aggregate and recognize the most appropriate use for each.
7. The learner will be able to describe the building and the use of wall and panel forms.
8. The will be able to demonstrate the techniques for forming openings in the foundation walls.
9. The learner will be able to explain foundation insulation and water proofing procedures with accuracy.
10. The learner will be able to discuss intelligently the design factors applicable to sidewalks and driveways.
11. The learner will be able to recognize the need for backfillings particularly important with block foundations.
12. The learner will be able to estimate concrete materials required for a specific area.

13. The learner will be able to discuss cold weather construction and the effects and changes required due to specific air temperatures.

14. The learner will be able to demonstrate the proper protection and covering for concrete.

15. The learner will be able to:

    a. Lay out a footing.

    b. Construct the forms for a stem wall.

    c. Construct the forms for a stem wall.

    d. Construct the forms for a sidewalk, driveway or patio.

    e. Remove forms from a poured stem wall and prepare for proper storage.

VOCABULARY

1. Ever-Green
2. Deciduous
3. Plain
4. Reinforced
5. Stepped
6. Excavation
7. Frost Line
8. Structurally Supported
9. ground Supported
10. Monolithic

QUIZ ON COMPREHENSION

OUTSIDE ASSIGNMENT

Set batter boards and building form for floor footing.

FOOTINGS AND FOUNDATIONS

Unit 6

QUIZ FOR COMPREHENSION

1. Grading must (always, sometimes) be done before building lines are laid out.
2. Carpenters always locate lot lines. True or False?
3. Batter boards should be located ____________ feet or more away from the building lines.
4. Building sites on steep slopes or rugged terrain should be rough graded before the building is laid out. True or False?
5. In cold climates, foundations should be located below the ________ line.
6. In residential construction, a safe design is usually obtained by making the width of the footing __________ as wide as the foundation wall.
7. A __________ footing is one that changes grade levels at intervals to accommodate a sloping lot.
8. What is a grade beam? ____ .
9. Foundation forms constructed of 1 in. boards should be held in place with stakes placed ______________ to _____________ ft. apart.
10. Loose dirt and debris (should or should not) be removed from the ground under a footing.
11. Concrete is made by mixing __________, _____________, _______________, and water.
12. Concrete hardens by a chemical action called _______________________.
13. Each sack of Portland cement holds ______________ lb.

14. Ready-mix concrete is purchased by the ______________________________ .

15. What is a pilaster? ____ .

16. When placing concrete in forms, working the concrete next to the forms tends to produce a ____________ surface along the form faces.

17. Wood sill plates are fastened to the top of a foundation walls with ________, __________ or ________________.

18. A concrete block specified as an 8 x 8 x 16 block is actually ______ x _________ x _____________.

19. A concrete basement wall may be waterproofed by using an application of ________________, ____________________ or ________________.

20. List three types of slab-on-ground. ______________, ______________ and _____________ .

21. In slab-on-ground construction, a ____________ should be laid over the sub-base to stop the movement of __________ ___________ into the concrete slab.

22. In most areas, sidewalks are _________ in. thick.

23. A wood foundation is installed on a layer of ______________ that is ____________ to ______________ in. thick.

24. In cold weather it is accepted practice to pour concrete over frozen ground. True or False?

25. How many 8 x 8 x 16 concrete blocks are required to lay 100 square feet of wall surface?

FOOTINGS AND FOUNDATIONS

Unit 6

QUIZ FOR COMPREHENSION

1. Grading must (always, sometimes) be done before building lines are laid out. Sometimes.
2. Carpenters always locate lot lines. True or False? False
3. Batter boards should be located 2 feet or more away from the building lines.
4. Building sites on steep slopes or rugged terrain should be rough graded before the building is laid out. True or False. True
5. In cold climates, foundations should be located below the frost line.
6. In residential construction, a safe design is usually obtained by making the width of the footing twice as wide as the foundation wall.
7. A stepped footing is one that changes grade levels at intervals to accommodate a sloping lot.
8. What is a grade beam? See Fig. 6-12, Thickened reinforced portion of a slab foundation.
9. Foundation forms constructed of 1 in. boards should be held in place with takes placed 2 to 3 ft. apart.
10. Loose direct and debris (should or should not) be removed from the ground under a footing. Should
11. Concrete is made by mixing cement, sand, gravel, and water.
12. Concrete hardens by a chemical action called hydration.
13. Each sack of Portland cement holds 94 lb.
14. Ready-mix concrete is purchased by the cubic yard.
15. What is a pilaster? Thickened portion of a concrete or masonry wall.
16. When placing concrete in forms, working the concrete next tot he forms

tends to produce a smooth surface along the form faces.

17. Wood sill plates are fastened to the top of a foundation wall with anchors, bolts, or squares.

18. A concrete block specified as an 8 x 8 x 16 block is actually 7 5/8 x 7 5/8 x 15 5/8.

19. A concrete basement wall may be waterproofed by using an application of cement plaster, bituminous, asphaltic material or polyethlene film.

20. List three types of slab-on-ground. Unreinforced slab with footing and wall, Reinforced slab, Monolithic slab. See fig. 6-45.

21. In slab-on-groung construction, a vapor barrier, water should be laid over the sub-base to stop the movement of ____________ __________ into the concrete slab.

22. In most areas, sidewalks are 4 in. thick.

23. A wood foundation is installed on a layer of porous that is 4 to 6 in. thick.

24. In cold weather it is accepted practice to pour concrete over frozen ground. True or False

25. How many 8 x 8 x 16 concrete blocks are required to lay 100 square feet of wall surface? 113

FLOOR FRAMING

Unit 7

OBJECTIVES

1. The learner will be able to explain the difference between platform and balloon framing.
2. The learner will be able to identify the main parts of a platform frame.
3. The learner will be able to calculate the load on girders and beams used residential construction.
4. The learner will be able to describe how layouts are made on header joists.
5. The learner will be able to explain the correct procedure to follow when assembling a floor frame.
6. The learner will be able to identify the parts of a floor truss.
7. The learner will be able to prepare a sketch that show over hangs and projections are framed.
8. The learner will be able to describe kinds of material used for subflooring.
9. The learner will be able to describe kinds of material used for subflooring.
10. The learner will be able to write the purpose of a termite shield.
11. The learner will be able to match the appropriate nails to their use in assembling the subfloor, sill and joists.
12. The learner will be able to demonstrate the ability to:
    a. Lay the sill and install the floor joist on sixteen and twenty four-inch centers.

b. Install bridging.

VOCABULARY

1. Truss
2. Plyethylene Vapor Barrier
3. Steel Beams
4. Stringer
5. Joist
6. Sill
7. Stud
8. Scab or Cross Tie
9. Girder
10. Footing

QUIZ FOR COMPREHENSION

OUTSIDE ASSIGNMENT

FLOOR FRAMING

Unit 7

QUIZ FOR COMPREHENSION

1. The type of framing used in most one-story construction is __________ ____________ .

2. When requirements call for the joists to be framed flush with the underside of a wood girder, it is best to use ________________________.

3. Standard construction usually requires that the sill be spaced back from the foundation wall a distance equal to ____________________ the ________________________.

4. The studs of a balloon type frame run continuously from the __________ to ____________ to the rafter plate.

5. Name the two types of steel beams used in residential construction.

6. In residential construction,the deflection of first floor joists under normal live loads should not exceed ________ of the span.

7. A member of the floor frame that runs from the main header to a header for an opening is called a ___________ joist.

8. When framing a floor opening, the double should be nailed in place before the second ___________ is installed.

9. Cantilevered joists should extend inward at least ________ times the distance that they overhang the supporting wall.

10. Large holes bored through joists for pipes or wiring should be made at the _________ (top, bottom, center).

11. Shiplap of a nominal width of 8 in. should be applied with ___________ (2, 3, 4,) 8 d nails at each joist.

12. When sheet material is used for the subflooring, the short dimension of a panel should run _____________ (parallel, perpendicular) to the

joist.

WALL AND CEILING FRAMING

Unit 8

OBJECTIVES

1. The learner will be able to name the detials of the sill construction and to identify the main parts of a wall frame.
2. The learner will be able to explain the methods of forming the outside corners and partition intersections of wall frames.
3. The learner will be able to show how rough openings are handled in wall construction.
4. The learner will be able to offer solutions for alternate header construction.
5. The learner will be able to explain plate and stud layout.
6. The learner will be able to make a story pole, a long measuring stick.
7. The learner will be able to describe the construction and erection of wall sections and partitions.
8. The learner will be able to continually study and plan the sequence of the job.
9. The learner will be able to do special construction where required in the plumbing of walls.
10. The learner will be able to demonstrate the process of frame construction requirements and procedures.
11. The learner will be able to recognize the possible need for "strongbacks" in certain types of construction.
12. The learner will be able to estimate materials required for wall frames, ceiling frames and sheating.
13. The learner will be able to discuss purchasing information and prices

for a specific job task.

VOCABULARY

1. Cripple
2. Trimmer
3. Sole Plate
4. Header
5. End Wall
6. Side Wall
7. Blocking
8. Double Trimmer
9. Top Plate
10. Toe Nail

QUIZ FOR COMPREHENSION

OUTSIDE ASSIGNMENTS

WALL AND CEILING FRAMING

Unit 8

QUIZ FOR COMPREHENSION

1. What is a sole plate? ______________________________.
2. How many studs are required for a plain wall panel 8'- 0" long if they are spaced 16 in. O.C.? ______________________________.
3. Trimmer studs stiffen the sides of an opening and carry the weight of the ____ ?
4. What is a story pole? ______________________________ ?
5. The first layout to be marked on the plates is __________ spacing.
6. A master stud pattern is laid out somewhat like a ______________ .
7. The layout of the cripple studs on the rough sill can be marked directly from the ________________ .
8. Most carpenters prefer to erect the ____________ (side, end) walls first.
9. What is the difference between let-in bracing and metal strap bracing?
10. Joints formed along the doubled top plate should be at least ______ apart.
11. Regular fiberboard sheeting (can, cannot) be used as a nailing base for exterior wall finish materials.
12. The position of the ceiling joists along the double plate should be coordinated with the ______________________.
13. The first step in estimating the number of studs required is to figure the total length of all __________ and ___________.
14. A strongback is needed for:
    a. Strengthening a long span of ceiling joists.

b. Maintaining proper spacing between ceiling joists.

c. Keeping joists even along their lower edges.

d. None of the above.

e. All of the above.

ROOF FRAMING OBJECTIVES

Unit 9

1. The learner will be able to list and recognize an sight the various roof types including gable, hip, gable, flat, shed and monsord.
2. The learner will be able to recognize the types of roof supports on the following systems, outside walls, ceiling joints and interior learning walls.
3. The learner will be able to determine the suitable roofing materials and determine the estimate cost of material for each type of roof.
4. The learner will understand and apply geometry to roof framing with the principles; the horizontal distance is the vertical distance is the hypotenuse.
5. The learner will be able to determine all slope and pitch.
6. The learner will be able to determine all unit measurements.
7. The learner will be able to calculate rafter sizes and will be able to lay out common rafters.
8. The learner will be able to physically erect a gable roof, jack rafters and collar beams.
9. The learner will be able to build a framework called roof truss construction.

ROOFING MATERIALS OBJECTIVES

Unit 10

1. The learner will be able to determine the types of material for different types of material for different types of roofing.
2. The learner will be able to match the definitions of seventeen terms to the correct terms.
3. The learner will be able to write the purposes of a roof.
4. The learner will be able to identify the components of a roof.
5. The learner will be able to match the terms designating roof types to the correct pictures.
6. The learner will be able to calculate the amount of roofing material needed for a given roof style.
7. The learner will be able to calculate the amount of roofing material needed for a given roof style.
8. The learner will be able to match the roofing fastener to the shingle types.
9. The learner will be able to demonstrate the ability to:
   a. Install flashing
   b. Install standard wood shingles
   c. Install shakes and junior shakes
   d. Install asphalt shingles
10. The learner will be able to identify the procedures for roll roofing, reroofing and built up roofing.
11. The learner will recognize the safety procedures when using mineral fiber shingles.
12. The learner will know and demonstrate the proper method for storing

shingles.

WINDOWS AND EXTERIOR DOORS

Objectives

1. The learner will be able to name a basic understanding of the various types, sizes and standards of window and door construction.
2. The learner will be able to recognize good quality in materials, fittings, weather stripping and finish.
3. The learner will be able to appreciate the importance of careful installation of the various units.
4. The learner will be able to become an expert in installation.
5. The leaner will be able to list the types of windows and will be able to discuss the variety of designs and method of operations.
6. The learner will be able to explain the difference between double hung-window, horizontal window, awning window, hopper window, multiple use jealousies and fixed window.
7. The learner will be able to demonstrate the important function for window height for particular situations including handicapped.
8. The learner will be able to select the proper window glass for a selected job.
9. The learner will be able to list the advantages in double and triple sealed glazing.
10. The learner will be able to discuss the requirements for screens and to recognize the difference between screens.
11. The learner will demonstrate how muntin are used for special effects in architecture and will be able to install horizontal regular and diamond muntins.

12. The learner will be able to list the parts of windows.

13. The learner will be able to locate positions of windows and will be able to read plans and elevations of the working drawings.

14. The learner will be able to recognize the size of each window unit or combination of unit.

15. The learner will be able to read detailed drawings to build the rough frame of the wall structure and to install units.

16. The learner will be able to make adjustments in a window frame by applying a joint extension.

17. The learner will be able to demonstrate the use of a door and window story pole to insure proper alignment when installing doors and windows.

18. The learner will be able to describe proper steps to take upon receiving windows on the job including such things as storage, adjustment to weather, unpacking, checking and priming.

19. The learner will be able to demonstrate the use of wedge blocks to install a window.

20. The learner will be able to demonstrate the use of a level and framing square to level and square a window during installation.

21. The learner will be able to demonstrate final permanent placement of a window, including use of a nail set to sink the nail head below the surface.

22. The learner will be able to install a fixed unit taking extra precautions because of the size and weight of the unit.

23. The learner will be able to seal the edge of a fixed unit using weep holes.

24. The learner will be able to build a simple wood frame for installing insulating glass.

25. The learner will be able to build the framework for and install glass blocks and small glass block panels.

26. The learner will be to list reason for using glass blocks and glass block panels in a building.

27. The learner will be able to list the normal sizes and thickness of glass blocks.

28. The learner will be able to determine heights or widths of openings required for glass block panels.

29. The learner will be able to determine the size and types of replacement

30. The learner will be able to list the steps in removing old window units.

31. The learner will be able to describe the steps necessary to prepare an old opening for installation of a replacement window.

32. The learner will be able to install outside and inside trim, using filler strips where necessary.

33. The learner will be able to show understanding of the necessity of window protection and sealing by describing caulking, packing and installation of metal flashing.

34. The learner will be able to describe functions of skylights in specific rooms or areas.

35. The learner will be able to frame a rough opening for a skylight.

36. The learner will be able to construct a skylight shaft and attach insulation to the sides to proper thickness.

37. The learner will be able to install a skylight into a shaft.

38. The learner will be able to list conventional door sizes.

39. The learner will be able to assemble a K.D. (knocked down) door frame.

40. The learner will be able to calculate frame and rough opening sizes for doors.

41. The learner will be able to install extension strips to fit stock frames into quarter wall thickness.

42. The learner will be able to position a door sill so it will be level with the finished floor.

43. The learner will be able to use blocking and wedges to level and straighten a door frame.

44. The learner will be able to nail the door frame in place and secure a plywood to the sill area.

45. The learner will be able to demonstrate the use of spacer shims in installing a prehung door unit.

46. The learner will be able to follow installation directions for glass doors of various manufactures.

47. The learner will be able to prepare a frame for a sliding glass door unit and install the unit upon completion of the structure.

48. The learner will be able to list stock sizes of garage doors.

49. The learner will be able to calculate the rough opening for frame construction of a garage door.

50. The learner will be able to follow manufacturer's instructions in installing garage door.

51. The learner will be able to recommend counterbalancing devices for specific sizes and weights of garage doors.

WINDOWS AND EXTERIOR DOORS

Unit 11

Vocabulary

1. Asphalt: A residue from evaporated petroleum. It is insoluble in water but is soluble in gasoline and melts when heated. Used for waterproofing roof coverings, and flooring tile.
2. Casement: A window in which the sash swings on its vertical edge, so it may be swung in or out.
3. Casing: The trimming around a door or window, either outside or inside, or the finished lumber around a post or beam.
4. Caulk: To seal and waterproof cracks and joints, especially around window and exterior door frames.
5. Chamber: Corner of a board beveled at a 45 deg. angle. Two boards butt-jointed and with chambered edges form a V-joint.
6. Door Frame: An assembly of wood parts that form an enclosure and support for a door. Door frames are classified as exterior and interior.
7. Double Hung Window: Window consists of two each that slide up and down in the window frame.
8. Drip Cap: A molding which directs water away from a structure to prevent see page under the exterior facing material. Applied mainly over window and exterior door frames.
9. Framing: The timber structure of a building which gives it shape and strength; including interior and exterior walls, floor, roof and ceilings.
10. Glazing: The process of installing glass into sash and doors. also

refers to glass panes inserted in various types of frames.

11. Header: Horizontal structural member that supports the load over an opening, such as a window or door. Also called lintel.
12. Hopper window: Window has a sash that is hinged along the bottom and swings inward.
13. Jealousies: A series of small horizontal overlapping glass slats, held together by an end metal frame attached to the faces of window frame side jambs or door stiles and rails. The slats or louvers move simultaneously like a Venetian blind.
14. Jamb: The top and two sides of a door or window frame which contact the door or sash; top jamb and side jambs.
15. Kiln Dried: Wood seasoned in a kiln by means of artificial heat, controlled humidity, and air circulation.
16. Knocked Down: Unassembled: Refers to structural units requiring assembly after being delivered to the job.
17. Lath: A building material of wood, metal, gypsum, or insulating board, fastened to frame of building to act as a plaster base.
18. Lintel: A horizontal structural member which supports the load over an opening such as a door or window.
19. Masonry: Stone, brick, hollow tile, concrete block, or tile, and sometimes poured concrete and gypsum block, or other similar materials, or a combination of same, bonded together with mortar to form a wall, pier, buttress, etc.
20. Millwork: The term used to describe products products which are primarily manufactured from lumber in a planning mill or woodworking plant; including moldings, door frames and entrances, blinds and shutters, sash and window units, doors, stairwork, kitchen cabinets,

mantels, cabinets and porch work.

21. Mullion: A slender bar or pier forming a division between units of windows, screens, or similar frames generally nonstructural.

22. Plumb: Exactly perpendicular or vertical; at right angles to the horizon or floor.

23. Rabbet: A rectangular shape consisting of two surfaces cut along the edge or end of a board.

24. Rough Opening: An opening formed by the framing members.

25. Sash: The framework which holds the glass in a window.

26. Sheathing: The structural covering. Consists of boards or prefabricated panels that are attached to the exterior studding or rafters of a structure.

27. Shim: A thin strip of wood sometimes wedge shaped, for plumbing or leveling wood members. Especially helpful when setting door and window frames.

28. Sill: The lowest member of the frame of a structure, usually horizontal, resting on the foundation and supporting the uprights of the frame. Also the lowest member of a window or outside door frame.

29. Skylight: Glazing frame into a roof.

30. Stile: The upright or vertical outside pieces of a sash, door, blind or screen.

31. Story Pole: A strip of wood used to lay out and transfer measurements for door and window openings, siding and shingle courses, and stairways. Also called a rod.

32. Transom: A small opening above a door separated by a horizontal member (transom bar). Usually contains a sash or a louver panel hinged to the transom bar.

33. Veneered Wall: A frame building wall with a masonry facing (example-single brick). A veneered wall is nonloadbearing.

34. Weephole: A small hole, as in a retaining wall, to drain water to the outside. Commonly used at the lower edges of masonry cavity walls.

35. Window Unit: Consists of a combination of the frame, window, weather stripping, and sash activation device. May also include screens and/or storm sash. all parts are assembled as a complete operating unit.

EXTERIOR WALL FINISH

Objectives

1. The learner will be able to list several exterior materials of a structure which are included under the broad heading "exterior finish."
2. The learner will be able to identify typical cornice designs.
3. The learner will be able to identify parts of cornice and make construction, describing functions and recommended materials.
4. The learner will be able to construct a cornice and rake from raw materials.
5. The learner will be able to construct a cornice from prefabricated materials.
6. The learner will be able to follow the manufacturer's instructions when installing a metal soffit.
7. The learner will be able finish the wall and prime exterior trim members rake section of the roof are covered.
8. The learner will be able to recognize the five types of horizontal siding and tell corner usages of each.
9. The learner will be able to describe the function of sheathing board and sheathing paper.
10. The learner will be able to describe the function of flashing.
11. The learner will be able to use story pole to install horizontal siding.
12. The learner will be able to explain the use of metal corners and corner boards.
13. The learner will be able to demonstrate how to cut and fit horizontal siding so that it fits tightly against window and door casings, corner

boards, and adjoining boards.

14. The learner will be able to describe the types and sizes of nails needed to apply specific siding and sheathing.
15. The learner will be able to describe the different nailing patterns required for different types of horizontal wood siding.
16. The learner will be able to explain the importance of a priming coat of paint.
17. The learner will be able to estimate the amount of horizontal siding needed for a particular structure.
18. The learner will be able to list width and nail specifications for installing match vertical siding.
19. The learner will be able to list width and nail specifications for installing board and batten applications.
20. The learner will be able to describe the process of "double coursing" shingles.
21. The learner will be able to interpret a chart of sizes and coverage for side wall shingles.
22. The learner will be able to explain the need for sheathing and roofing felt in applying shingles.
23. The learner will be able to explain how to line up shingles by tacking temporary strip to the wall.
24. The learner will be able to describe the single covering method for side wall application.
25. The learner will be able to describe the application of shingle panels.
26. The learner will be able to describe how to reside a building over an old siding of shingles.
27. The learner will be able to list the advantages of using mineral fiber

siding.

28. The learner will be able to follow manufacturer's instructions for mineral fiber siding.
29. The learner will be able to list the resaons for use of plywood siding.
30. The learner will be able to list the standard sizes and thickness of plywood panel and where each would be used.
31. The learner will be able to apply plywood siding using proper jointing procedures and according to local codes.
32. The learner will be able describe how application of hardboard siding is different from application of plywood siding.
33. The learner will be able to demonstrate the use of available aides in applying siding.
34. The learner will be able to list the advantages of aluminum siding.
35. The learner will be able to explain how to ground a building with aluminum siding.
36. The learner will be able to identify and explain the use of various accessories for use with vinyl siding.
37. The learner will be able explain the process of stuccoing an outside wall.
38. The learner will be able to describe how to apply stone or brick veneer to an outside wall.

EXTERIOR WALL FINISH

Unit 12

Vocabulary

1. Backing Board: (also, backer board): In a two-layer drywall system, the base panel of gypsum drywall. It uses gray liner paper as facing and is not suitable as a top surface.
2. Batten: A strip of wood placed across a surface to cover joints.
3. Bevel siding: Used as finish covering on the exterior of a structure.

   It is usually manufactured by "resawing" dry, square surfaced boards diagonally to produce two wedge-shaped pieces.
4. Brick Veneer Construction: A type of construction in which a wood-frame construction has an exterior surface of single brick.
5. Cornice: Exterior trim of a structure at the meeting of the roof and wall usually consists of panels, boards, and moldings.
6. Drop Siding: Siding, usually 3/4 in. thick and machined into various patters. Drop siding has tongue and groove or shiplap joints.
7. Eaves: The lower part of a roof that projects over an exterior wall. Also called the overhang.
8. Fascia: A wood member used for the outer face of a box cornice where it is nailed to the ends of the rafters and lookouts.
9. Flashing: Sheet metal or other material used in roof and wall construciton (especially around chimneys and vents) to prevent rain or other water from entering.
10. Frieze: a boxed cornice wood trim members attached to the structure where the soffit (plancier) and wall meet.

11. Gable: That portion of a wall contained between the slopes of a double-sloped roof or that portion contained between the slope of a single-sloped roof and a line projected horizontally through the lowest elevation of the roof construction.

12. Gypsum Wallboard: Wall covering panels consisting of a gypsum core with facing and backing of paper.

13. Hardboard: A board material manufactured of wood fiber, formed into a panel having a density range of approximately 50 to 80 lb. per cu.ft.

14. Joist: One of a series of parallel framing members used to support floor and ceiling loads, and supported in turn by larger beams, girders, or bearing walls.

15. Lookout: Structural member running between the lower end of a rafter and the outside wall. Used to carry the underside of the overhang; plancier or soffit.

16. Ledger: A strip attache to vertical framing or structural members to support joists or other horizontal framing. Similar to ribbon strip.

17. Plancier: The underside of an eave or cornice, usually horizontal.

18. Prefabricated Construction: Type of construction so designed as to involve a minimum of assembly at the site, usually comprising a series of large units manufacture in a plant.

19. Rafter: One of a series of structural members of a roof designed to support roof loads. The rafters of a flat roof are sometimes called roof joists.

20. Rake: The trim members that run parallel to the roof slope and form the finish between the roof and wall at a gable end.

21. Shakes: Handsplit shingles.

22. Sheathing Paper: A building material used in wall, floor, and roof

construction to resist the passage of air.

23. Shutter: A wood assembly of stiles and rails to form a frame which encloses panels used in conjunction with door and window frames. Also may consist of vertical boards cleated together.

24. Siding: The finish covering of the outside wall of a frame building. Many different types are available.

25. Soffit: The underside of the members of a building, such as staircases, cornices, beams, and arches. Relatively minor in size as compared with ceilings. Also called drop ceiling and furred-down ceiling.

26. Toenailing: To drive a nail at a slant with the initial surface in order to permit it to penetrate into a second member.

THERMAL AND SOUND INSULATION

Unit 13

OBJECTIVE

1. The learner will be able to recognize whether a specific material conducts heat rapidly or slowly.
2. The learner will be able to understand how convection currents are created and are used as insulation, and list practical applications.
3. The learner will able to explain how shiny surfaces can be used to provide insulation and list practical applications.
4. The learner will be able to describe the qualities of a good commercial insulation material.
5. The learner will be able to read charts of R-values for commonly used construction and Insulation materials and recommended insulation r-values; from this information determine what is needed to insulate a particular building in a given geographic area.
6. The learner will be able to list the four broad classifications of insulation, their properties and usages.
7. The learner will be able to explain where to insulate given rooms and areas.
8. The learner will be able to describe the process of insulating existing foundations.
9. The learner will be able to define "dew point".
10. The learner will be able to describe how the dew point can reduce the efficiency of insulation and may eventually damage structural members.
11. The learner will be able to name commonly used vapor barriers and describe the function of a vapor barrier.

12. The learner will be able to identify aspects of a well ventilated structure.
13. The learner will be able to list precautions to take when installing fiberglass insulation.
14. The learner will be able to demonstrate proper installation of batts and blankets in a given area of a structure.
15. The learner will be able to demonstrate proper installation of fill insulation in a given area of a structure.
16. The learner will be able to follow manufacturer's specification when installing various types of rigid insulation.
17. The learner will be able to describe how basement walls could be insulated.
18. The learner will be able to describe a satisfactory vapor barrier to be applied on all surfaces of outside walls and ceiling when insulating as existing structure where no vapor barrier can be installed.
19. The learner will be able to list the locations where caulking and sealing is usually required in order to reduce air infiltration.
20. The learner will be able to identify common types of weatherstripping and explain the usage of each.
21. The learner will be able to estimate the amount of insulating materials necessary for a given area.
22. The learner will be able to describe how sound could be controlled in a given area or room.
23. The learner will be able to describe how sound transmission to other rooms could be controlled.
24. The learner will be able to identify different methods of constructing interior walls and interpret the STC sound transmission class for

each.

25. The learner will be able to identify different methods of constructing floors and ceilings and interpret the STC for each.
26. The learner will be able to describe methods which reduce sound around doors and windows.
27. The learner will be able to describe materials available to reduce noise within a space and describe how selected materials help noise reduction.
28. The learner will be able to describe how suspended ceilings are installed.
29. The learner will be able to identify where acoustical plasters are generally used.
30. The learner will be able to follow instrucitons for installation and maintenance of acoustical materials.

THERMAL AND SOUND INSULATION

Vocabulary

1. Acoustical Materials: Types of tile, plaster, and othermaterials which absorb sound waves. Generally applied to interior wall surfaces to reduce reverberation or reflection of the waves.
2. Conduction: Transmission of heat from one molecule to another within a material or from one material to another when they are held in direct contact.
3. Convection: The transfer of heat by another agent, usually air.
4. Degree Day: Method of measuring the harshness of climate for insulation and heating purposes. A degree day is the product of one day and the number of degrees the mean temperature is below 65 F.
5. Dew Point: The temperature at which the air is completely saturated with moisture.
6. Drywall: Sheet materials used for wall covering which do not need to be mixed with water before application.
7. Fiber Board: A broad term used to describe sheet material of widely varying densities; manufactured from wood cane, or other vegetable fibers.
8. Insulation: (Thermal) any material high is resistance to heat transmission that is place din structures to reduce the rate of heat flow.
9. Plaster: A mixture of lime, cement, and sand, used to cover outside and inside wall surfaces.
10. Polystyrene Panels: Rigid insulation manufactured from expanded beads

of plastic.

11. R-Value: A number which specifies the efficiency of an insulating material like fiberglass batting, foam, or other similar material.
12. Radiation: Transmission of heat by wave motion in about the same manner as light.
13. Sole Plate: The lowest horizontal strip on wall and partition framing.

    The sole plate for a partition is supported by a wood subfloor, concrete slab, or other closed surface.
14. Subfloor: Boards or panels laid directly on floor joists over which a finished floor will be laid.
15. Truss: a structural unit consisting of such members as beams, bars, and ties; usually arranged to form triangles. Provides rigid support over wide spans with a minimum amount of material.
16. Vapor Barrier: A watertight material used to prevent the passage of moisture of water vapor into or through structural elements (floors, walls, ceilings).
17. Vermiculite: Mineral closely related to mica, with the faculty of expanding on heating to form lightweight material with insulating qualities. Used as bulk insulation, also as aggregate in insulating and acoustical plaster, and in insulating concrete floors.
18. Weatherstrip: Narrow strips of metal, vinyl plastic, or other material, so designed that when installed at doors or windows, they will retard the passage of air, water, moisture, or dust around the door or window sash.

INTERIOR WALL AND CEILING FINISH

Unit 14

Objectives

1. The learner will be able to recommend a particular material to use for interior walls, and ceiling given the room and situation.
2. The learner will be able to list the advantages of using drywall materials for walls and ceilings.
3. The learner will be able to describe the two methods of arranging single layer drywall sheets.
4. The learner will be able to describe how to measure and cut wallboard.
5. The learner will be able to demonstrate application of nails, screws and adhesive in installing wallboard.
6. The learner will be able to demonstrate how to conceal wallboard joints and fasteners.
7. The learner will be able to describe the use of metal corner beads and metal channel trim.
8. The learner will be able to describe why double layered wallboard improves the quality of the wall.
9. The learner will be able to describe how the finish layer is laminated to the base layer in two ply wallboard.
10. The learner will be able to install moisture resistant wallboard in a tub/shower area.
11. The learner will be able to describe the application of veneer plaster.
12. The learner will be able to install predecorated wallboard with molding so that panels are carefully aligned.
13. The learner will be able to describe installation of wallboard on both

interior and exterior walls.

14. The learner will be able to explain how to condition plywood and hardwood panels to the room where they will be installed.
15. The learner will be able to plan the layout of plywood and hardwood panels for the most pleasing effect in color and grain patterns.
16. The learner will be able to describe installation of plywood and hardwood panels.
17. The learner will be able to describe the installation of solid wood paneling.
18. The learner will be able to list the questions of gypsum plaster.
19. The learner will be able to list the commonly used plaster bases and qualities of each.
20. The learner will be able to identify the steps in installing gypsum lath.
21. The learner will be able to identify the steps in installing insulating lath.
22. The learner will be able to identify the steps in installing metal lath.
23. The learner will be able to list methods of reinforcing the plaster base.
24. The learner will be able to explain the need for plaster grounds.
25. The learner will be able to attach furring strips to masonry surfaces to provide a plaster base.
26. The learner will be able to demonstrate care of tools and equipment by washing out the mixer after each batch of plaster has been prepared.
27. The learner will be able to demonstrate the application of the scratch coat.

28. The learner will be able to demonstrate the application and leveling of the brown coat.
29. The learner will be able to demonstrate the application and smoothing of the finish coat.
30. The learner will be able to list the qualities to consider when selecting a ceiling tile.
31. The learner will be able to describe the layout procedure for ceiling tile.
32. The learner will be able to furring strips for ceiling tile.
33. The learner will be able to install ceiling tile on furring strip using both a staplergun and adhesive.
34. The learner will be able to describe the metal tract system for installing ceiling tile.
35. The learner will be able to describe how to construct the metal framework used for suspended ceilings.
36. The learner will be able to estimate the amount of specific wall or ceiling covering materials required for a given room or area.

INTERIOR WALL AND CEILING FINISH

Unit 14

Vocabulary

1. Corner Bead: Molding used to protect corners. Also a metal reinforcement placed on corners before plastering.
2. Furring: Narrow strips of wood spaced to form a nailing base for another surface. Furring is used to level, to form an air space between the two surfaces, and to give a thicker appearance to the base surface.
3. Screed: A tool used in concrete work to level and smooth a horizontal surface. Consists of a 3 to 5 ft. wood or metal strip attached to a pole.
4. Veneer Plaster: Interior wall covering consisting of a gypsum lath base and surfacing of 1/8 in. gypsum plaster.
5. Wall Board: Wood pulp, gypsum, or other materials made into large rigid sheets that may be fastened to the frame of a building to provide a surface finish.
6. Wet Wall: An interior wall finish surface usually consisting of 3/8 in. gypsum plaster lath and 1/2 in. gypsum plaster applied to the lath surface.

FINISH FLOORING

Unit 15

Objectives

1. The learner will be able to list various materials used for floor covering and the areas or rooms in which each are commonly installed.
2. The learner will be able to list the species of hardwoods and softwoods commonly used for flooring.
3. The learner will be able to list the three general types of wood flooring used in residential structure and describe how each is laid.
4. The learner will be able to explain factors which effect grading of hardwood flooring.
5. The learner will be able to explain the importance of conditioning wood flooring.
6. The learner will be able to recognize qualities of a good subfloor.
7. The learner will be able to describe how to install and nail wood strip flooring on squared areas as well as around projections.
8. The learner will be able to identify the correct procedure for laying strip or plant flooring throughout a number of rooms by labeling a floor plan.
9. The learner will be able to estimate the number of board feet of strip flooring needed to cover a given area.
10. The learner will be able to describe how to install a finished wood flooring system over a concrete slab using sleepers.
11. The learner will be able to demonstrate installation of tongue and groove block type flooring.
12. The learner will be able to list advantages and disadvantages of

prefinished wood flooring.

13. The learner will be able to describe the underlayment necessary for carpeting and resilient materials.
14. The learner will be able to describe how to install underlayment.
15. The learner will be able to explain why a base layer of felt is often applied over the underalyment when installing linoleum.
16. The learner will be able to describe how to establish a centerline to install tile.
17. The learner will be able to spread adhesive to lay tile.
18. The learner will be able to lay tile, beginning at the center of the room and finishing with cover base.
19. The learner will be able to install sheet vinyl flooring.

FINISH FLOORING

Unit 15

Vocabulary

1. Adhesive: A substance capable of holding material together by surface attachment. A general term that includes glue, cement, mastic, and paste.
2. Blind Nailing: Rafers to tongue-and-groove flooring. Nails are placed at the root of the tongue where they will be hidden. The nails pierce the subfloor at a 45 degree angel.
3. Moisture Content: The amount of water contained in wood expressed as a percentage of the weight of oven-dry wood.
4. MR (moisture resistant) Wall Board: A type of gypsum wallboard processed to resist the effects of moisture and high humidity. It is used as a base under ceramic tile and other nonabsorbent finishes used in showers and tub alcoves.
5. Particle board: A formed panel consisting of particles of wood flakes, shavings, slivers, etc., bonded together with a synthetic resin or other added binder.
6. Resilient: The ability of a material to withstand temporary deformation, the original shape being assumed when the stresses are removed.
7. Sleeper: A timber laid on or near the ground to support floor joists and other structures above. Also wood strips laid over or embedded in a concrete floor to which finish flooring is attached.
8. Spline: A small strip of wood that fits into a groove or slot of both members to form a joint.

STAIR CONSTRUCTION

Unit 16

Objective

1. The learner will be able to list other terms that can be properly substituted for stairs.
2. The learner will be able to identify the different stair types on diagrams.
3. The learner will be able to label basic stair parts and terms.
4. The learner will be able to plan the rough opening for a given stairwell.
5. The learner will be able to calculate the rise-run or riser-tread ratio.
6. The learner will be able to explain the sequence to follow in constructing a main stair.
7. The learner will be able to interpret stair layouts in architectural drawings.
8. The learner will be able to calculate the number and size of risers and treads (less nosing) for a given stair run; interpret a chart with this information.
9. The learner will be able to lay out a stair stringer.
10. The learner will be able to identify basic stair riser shapes and tread nosing.
11. The learner will be able to identify basic types of stair stringers.
12. The learner will be able to plan a carefully scaled layout for winder stairs.
13. The learner will be able to label parts of an open stair.
14. The learner will be able to list basic stock parts commonly available

for stair construction.

15. The learner will be able to list advantages of a metal spiral stairway.

16. The learner will be able to name the primary uses of disappearing stair units.

STAIR CONSTRUCTION

Unit 16

Vocabulary

1. Baluster: Turned and/or square spindle-like vertical stair member which supports the stair rail.
2. Balustrade: A railing consisting of a series of balusters resting on a base, usually the treads, which supports a continuous stair or hand rail.
3. Headroom: The clear space between floor line and ceiling, as in a stairway.
4. Newel: The main post at the start of the stairs and the stiffening post at the landing; a stair newel.
5. Nosing: The part of a stair tread which projects over the riser, or any similar projection; a term applied to the rounded edge of a board.
6. Riser: The vertical stair member between two consecutive stair treads.
7. Stairway, Stair, or Stairs: A series of steps, with or without landings, or platforms, usually between two or more floors of a building.
8. Tread: The horizontal part of a step on which the foot is placed.

and state their most common usages.

15. The learner will be able to define a deadbolt.
16. The learner will be able to determine the "hand of a door".
17. The learner will be able to follow manufacturer's instructions to install a given type of lock.
18. The learner will be able to explain the function of thresholds and vinyl sealing strips.
19 The learner will be able to follow the manufacturer's instructions to install a prehung door.
20. The learner will be able to follow the manufacturer's instructions for hanging a pocket-type sliding door and a bypass type sliding door.
21. The learner will be able to follow the manufacturer's instructions for hanging bifold and multipanel folding doors.
22. The learner will be able to list the common usages of each types of sliding and folding door.
23. The learner will be able to label a diagram of a double hung window.
24. The learner will be able to describe the installation of a window.
25. The learner will be able to describe the use and installation of baseboard and base shoe.

DOORS AND INTERIOR TRIM

Unit 17

Objectives

1. The learner will be able to list the functions of molding.
2. The learner will be able to identify functions provided by diagrams of specific molding.
3. The learner will be able to assemble a doorframe.
4. The learner will be able to install a doorframe.
5. The learner will be able to apply door easing to each side of the doorframe.
6. The learner will be able to describe the construction of panel doors and flush doors.
7. The learner will be able to list the standard thickness and measurements for exterior and interior doors.
8. The learner will be able to interpret the architectural drawings and door schedule to determine the correct type of door for an opening and the direction it will swing.
9. The learner will be able to describe door installation and recommended clearances around interior doors.
10. The learner will be able to cut gains for hinges by using a routing template.
11. The learner will be able to install hinges and hang the door.
12. The learner will be able to make minor adjustments in door clearance by using cardboard shims.
13. The learner will be able to install a door stop.
14. The learner will be able to identify basic types of door lock sets

DOORS AND INTERIOR TRIM

Unit 17

Vocabulary

1. Base Shoe: Small narrow molding used around the perimeter of a room where the baseboard meets the finish floor.
2. Dead Bolt: (also called a dead bolt lock): Special door security consisting of a hardened steel bolt and a lock. Lock is operated by a key on the outside and by either a key or handle on the inside.
3. Door Stop: A molding nailed to the faces of the door frame jambs to prevent the door from swinging through.
4. Gain: Notch or mortise cut to receive the end of another structural member or a hinge and other hardware.
5. Molding: A relatively narrow strip of wood, usually shaped to a curved profile throughout its length. Used to accent and emphasize the ornamentation of a structure and to conceal surface or angle joints.
6. Threshold: A wood member, believed or tapered on each side, used to close to the space between the bottom of a door and the sill or floor underneath . Sometimes called a saddle.

CABINET MAKING OBJECTIVES

Unit 18

The learner will study and apply knowledge gained in the fields of machine operation and safety, as well as woodworking materials production and use. The learner will use these skills to produce a cabinet project, including door and drawer construction, to show mastery of the subject matter.

The learner will be able to perform various problem solving and manual skills, tasks and understand concepts in the areas outlined above. They will also demonstrate their knowledge of the subject matter by taking tests on each unit and passing each with at least 70%.

The learner will be provided with an opportunity for further develop skills and dexterity of hand/eye coordination needed to operate equipment. Besides these obvious manual skills the learner will also be presented material to broaded their knowledge of the woodworking industry. With this background they can meet the challenges to excellence and pride of work that will serve them in their later careers. Through this the Learner will also get a broader understanding of our technological society.

SKILLS

The Learner will be able to:

1. Read and use measuring devices
2. Read and draw detained working drawings
3. Figure a bill of material
4. Design their own project
5. Work safely with hand and power woodworking tools

6. Make various woodworking joints on machinery
7. Fasten and assemble parts
8. Stain and varnish projects
9. Work effectively with power tools
10. Identify a variety woods visually
11. Identify and use wood products easily
12. Select and use assorted metal fasteners
13. Properly choose and use a variety of wood finishes

METHODS/MATERIALS

Methods:

Lecture

Demonstration

Discussions

Written Assignments

Research

Practical hands on assignment

Materials:

Films/Video

Worksheets

Filmstrips

Textbooks

Wood products

Patterns

Flip Charts

EVALUATION METHODS

Individual assignments

Quizzes

Unit tests/final exams

Project evaluation

Clean up and daily performance

1. The learner will demonstrate the use of related measuring devices.
    a. The learner will demonstrate the use of the standard ruler in increments up to the sixteenths.
    b. The learner will demonstrate the specific uses of each of the squares and bevels.
    c. The learner will demonstrate the particular uses of the dividers, compass, protractor, center square and the other specific measuring devices.
2. The learner will make a minimum of one medium-sized project with woodworking machines.
    a. The learner will make a plan and bill of materials of the project to be made. (Plans may be obtained from outside sources). Plans must be checked and approved by the instructor.
    b. The learner will construct the object using the appropriate power tools. Each step in construction must be checked by the instructor for accuracy.
    c. The learner will apply an appropriate finish to the object. Instructor will check for any irregularities, if such are encountered.
3. The learner will make minimum on one large project with wood working machines.
    a. The learner will make a detailed plan and bill of materials for the project to be made. The project must include doors

and/or drawers. A project such as a chair would also be acceptable. (Plans may be obtained from outside sources).

   b. The learner will construct the object using the appropriate power tools. Advanced wood joints an construction techniques should be attempted if possible. Progress in each step will be observed by the instructor, and various helps will be offered as difficulties arise.

   c. The learner will apply an appropriate finish to the object.

4. The learner will identify 50-60 hand tools.
   a. The learner will visually identify, by name, 50-60 hand tools.
   b. The learner will orally and/or in written form identify the specific use of 50-60 hand tools.
   c. The learner will correctly spell the names of 50-60 hand tools.

5. The learner will safely use all woodworking machine.
   a. The learner will understand the proper use of each woodworking machine.
   b. The learner will be able to perform all the basic functions of each machine in a safe manner.

6. The learner will describe how a project was made.
   a. The learner will explain the design and drawing of the project's planning, and what, if any, changes were made from the original plan.
   b. The learner will explain, in detail, the steps and machines used in the construction of the project, and why certain logical sequences were followed.
   c. The learner will explain how the finish was selected applied

to the project.

7. The learner will recognize the difference between hardwoods and softwoods.
    a. The learner will recognize the difference between hardwoods and ten common hardwoods which are used in woodworking.
    b. The learner will know the common characteristics of four softwoods and ten hardwoods.
    c. The learner will know the basic uses of softwoods and hardwoods, respectively.
8. The learner will recognize the different adhesives, materials, and fasteners for woodworking.
    a. The learner will know the characteristics and uses of four common adhesives used in woodworking.
    b. The learner will know the characteristics and uses of ten wood products, such as plywood, hardwood, etc.
    c. The learner will know the types and uses of various finishing materials such as abrasives, paints, stains, etc.
    d. The learner will be able to visually identify various fasteners, and tell the specific use of each as applied to woodworking.
9. The learner will apply theory to practical experience, such as the proper use of a table saw.
    a. The learner will do required reading assignments on various aspects of woodworking, and then apply this knowledge in the individual production of a project.
    b. The learner will view required filmstrips on various aspects of wood working, and this knowledge in the individual

production of a project.

    c. The learner will observe various live demonstrations of advanced techniques used on the machines, as given by the instructor; and then apply this knowledge in the individual project.

10. The learner will recognize quality and good design in manufactured products.
    a. The learner will be able to point out what features constitute good design and proportion in furniture.
    b. The learner will be able to point what features constitute good construction (especially in wood joints) in furniture.
    c. The learner will understand the good and bad points of materials used in the construction of furniture.
11. The learner will perform one lathe project.
    a. The learner will understand the basic use of the wood lathe.
    b. The learner will design and turnout a spindle turning project and/or face plate turning project.
    c. The learner will design a wood turning project into a finished product such as table legs.
12. The learner will demonstrate the ability to follow all safety rules.
    a. The learner will study and successfully pass a written safety test for each woodworking machine in the lab.
    b. The learner will take practical safety test for each advanced procedure to be performed on each woodworking machine to be used in the lab, under the direct evaluation of the instructor.
    c. The learner will be sufficiently penalized for any failures in

following prescribed safety rules in the lab.

13. The learner will keep all areas of the laboratory free from safety hazards.
    a. The learner will keep his/her work area clean and safe.
    b. The learner will report any worn, broken, or otherwise unsafe tools or machines to the instructor.
    c. The learner will assist the instructor in reminding fellow students of the safety rules, especially in proper use of eye protection.
14. The learner will wear proper eye and clothing protection.
    a. The learner will always wear eye protection whenever machinery is being used in the lab.
    b. The learner will wear the lab apron whenever he/she is working in the lab.
15. The learner will report all injuries to the instructor as soon as possible.
    a. The learner will understand the importance of time in treating serious injuries.
    b. The learner will know the proper procedure that will be followed in the lab in case of a serious injury.
    c. The learner will understand the importance of informing the instructor even in cases of minor injuries, to prevent infection.
16. The learner will list the safety rules for both power and hand tools.
17. The learner will recognize the potential danger of using power tools.
    a. The learner will know the specific dangers in using each of the power tools.

    b. The learner will view safety filmstrips on each power tool.
    c. The learner will view several safety filmstrips which will portray the potential safety hazards in working with power tools.

18. The learner will strengthen his/her background "readiness" information so that he/she may better equipped to identify career interest and qualify for advanced training.
    a. The learner will, periodically, research various career interest for personal growth.
    b. The learner will be given information on General Career areas to help the student select areas of possible interest.
    c. The learner will be guided by the instructor and/or counselors in choosing high school classes which would help him/her develop a solid base for future training in a chosen career.
19. The learner will summarize occupational opportunity.
    a. The learner will list ten occupations which interest him/her.
    b. The learner will match his personal interest with five of the possible occupational opportunities and so some basic research on those.
    c. The learner will be grouped with three other students who share similar occupational interests. They will share and discuss their research findings.
20. The learner will demonstrate an understanding of the lumber production process.
    a. The learner will be able to explain the specific processes changing timber into several wood products.
    b. The learner will list and describe the various occupations in

the lumber industries.

   c. The learner will visit, if possible a working lumber mill on a field trip.

21. The learner will define careers in woodworking and related fields.
    a. The learner will list 40 careers in the woodworking or related fields.
    b. The learner will describe, in detail, 15 woodworking careers, including job descriptions, working conditions, salary, etc.
    c. The learner will, with the help of the instructor and/or the counselors, obtain information on six careers which must interest them in the woodworking area.
22. The learner will display an understanding of the importance of being on time and being dependable.
    a. The learner will come to class on time.
    b. The learner will perform his/her cleanup assignment at the end of each lab day.
    c. The learner will properly perform his/her cleanup assignment at the end of the lab day.
23. The learner will successfully write a resume.
    a. The learner will review the essential parts of a good resume.
    b. The learner will update and/or improve his personal resume.
    c. The learner will learn the importance of a resume and its use in applying for a job.
24. The learner will describe the importance of being properly groomed at all times, especially for an interview.
    a. The learner will understand the value of wood and woodworking in a historical sense from the Early American Era to the

present time.

   b. The learner will participate in at least one mock interview during the year to prepare him/her for future job hunting.

25. The learner will understand the importance of woodworking in our society.
   a. The learner will discuss the asthenic quality of woodworking as opposed to other types of materials.
   b. The learner will explain the value of woodworking as a hobby for the average American.
26. The learner will determine advantages and disadvantages of self employment and outside employment.
   a. The learner will study and discuss the financial and personal advantages and disadvantages of owning and operating a small business.
   b. The learner will study and discuss the financial and personal advantages and disadvantages of working in a small business situation.
   c. The learner will study and discuss the financial and personal advantages and disadvantages of working for a large company.
27. The learner will display desirable working attitudes, working relations, and a sense of responsibility.
   a. The learner will work in harmony with his/her fellow students.
   b. The learner will learn acceptable ways of expressing dissatisfaction and conflicts in work relationships and working conditions.
   c. The learner will develop sense of responsibility concerning his own property and that of others.

28. The learner will demonstrate a feeling of pride in the ability to do useful tasks and assume the responsibility for the care and use of property.

    a. The learner will strive to do his/her best on each assignment/project, and will attempt to improve his/her skills as time passes.
    b. The learner will perform each required or chosen task in a manner that would display skill and pride of work.
    c. The learner will develop a sense of responsibility concerning his own property and that of others.

29. The learner will discover the value of woodworking during leisure time.

    a. The learner will understand the benefits of having a constructive hobby, and its relation to relieving stress.
    b. The learner will discuss the advantages of having woodworking as a hobby.

30. The learner will practice good hygiene.

    a. The learner, through the production of objects, will develop a sense of satisfaction in work completed.
    b. The learner will strive to produce projects that will be pleasing to others, and will foster respect for their ability.
    c. The learner will try to compliment other's work, and so build other's self-esteem and pride.

32. The learner will use time efficiently.

    a. The learner will be in class as much as is possible, in order to take full advantage of the instruction and the facilities of the lab.
    b. The learner will use the lab time as much as is possible, in

order to take full advantage of the instruction and the facilities of the lab.

c. The learner will work with others, and so make the lab a pleasant place to work.

CHIMNEYS AND FIREPLACES

Unit 19

Objectives

1. The learner will be able to list specifications for a masonry chimney regarding footings and thickness of walls.
2. The learner will be able to follow building codes and manufactures recommendations when planning a chimney.
3. The learner will discuss flue linings recommended by the National Board of Fire Underwriters.
4. The learner will be able to explain construction of the flue lining.
5. The learner will be able to demonstrate understanding of final construction of the chimney, including corbeling and prevention of water leakage.
6. The learner will be able to label parts of a masonry fireplace on a diagram and discuss construction steps.
7. The learner will be able to interpret an architectural plan for fireplace construction.
8. The learner will be able to read a chart on recommended dimensions for fireplace sizes and apply the information to a specific case.
9. The learner will be able to discuss specifications for the side and back walls of the combustion chamber and tell why they are as such.
10. The learner will be able to diagram smoke flow within the damper throat and flue explain how the damper keeps downward current from entering the room.
11. The learner will be able to define the need for a smoke shelf and chamber.

12. The learner will be able to calculate the area for a chimney flue.

13. The learner will be able to make adjustments from standard fireplace construction to incorporate contemporary fireplace design.

14. The learner will be able to follow manufacturer's specifications to install a circulator unit.

15. The learner will be able to label a diagram to show how masonry is installed around a circulator unit.

16. The learner will be able to describe how to construct and install a prefabricated chimney according to manufacturer's instructions.

17. The learner will be able to consult local building codes in regard to installing a prefabricated fireplace and chimney.

18. The learner will be able to list ways to improve the efficiency of fireplace units.

CHIMNEYS AND FIREPLACES

Unit 19

Vocabulary

1. Case: A wood frame jutting from an outside wall which supports a prefabricated chimney. A prefabricated fireplace is often enclosed.

2. Corbel out: To extend outward from the surface of a masonry wall one or more courses to form a supporting ledge.
3. Counter Flashing: Flashing used on chimneys at the roof-line to cover shingle flashing and prevent moisture.
4. Flue: the space or passage in a chimney through which smoke, gas, or fumes rise. Each passage is called a flue, which with the surrounding masonry, makes up the chimney.
5. Trimmer: The beam or floor joist in to which a header is framed. Adds strength to the side of the opening.
6. Triple Wall: A type of chimney flue made with three metal pipes, each inside another. The concentric arrangement provides safety from fire while its light weight makes installation easy.

POST-AND-BEAM CONSTRUCTION

Unit 20

Objectives

1. The learner will be able to define "post-and-beam construction."
2. The learner will be able to list several advantages of post-and-beam construction.
3. The learner will be able to suggest necessary adjustments for given situations in construction foundations and posts in a particular structure.
4. The learner will be able to identify types of beams and make recommendations concerning the type to use in given situations.
5. The learner will be able to read a chart to determine allowable spans for vertical glue-laminated beams.
6. The learner will be able to discuss special fasteners to use in joining a post-and-beam frame.
7. The learner will be able to demonstrate construction of various beam styles.
8. The learner will be able to explain the support necessary for a given partition.
9. The learner will be able to list several considerations for selecting planks for floor and roof decking.
10. The learner will be able to describe insulation and vapor barrier requirements in construction of a plan roof structure for cold climates.
11. The learner will be able to label a diagram of construction details for stressed skin panels.
12. The learner will be able to describe when use of box beams is

recommended.

13. The learner will be able to discuss laminated structural members which are available on the market.

POST-AND-BEAM CONSTRUCTION

Unit 20

Vocabulary

1. Beam: A principal structural member used between posts, columns, or walls
2. Partition: A wall that subdivides space within any story of a building.
3. The purlings: Horizontal roof members used to support rafters between the plate and ridge board.
4. Stressed Skin: Two facings, one glued to one side and the other to the opposite side of an inner structural framework form a panel. Facings may be of plywood or other suitable material.
5. Tail Beam: A relatively short beam or joist supported by a wall on one end and by a header on the other.

PREFABRICATION

Unit 21

Objectives

1. The learner will be able to define the term "prefabrication."
2. The learner will be able to discuss the construction components available in prefabricated form.
3. The learner will be able to list advantages of using prefabricated construction units.
4. The learner will be able to understand general construction method for precut and panelized building prefabrication.
5. The learner will be able to discuss the packages available in prefabricated buildings regarding percent of completeness.
6. The learner will be able to list advantages of sectionalized or modular building construction.
7. The learner will be able to list disadvantages of sectionalized or modular building construction.
8. The learner will be able to explain how the construction of a mobile home differs from that of a modular home.
9. The learner will be able to list the order for on-site construction of a prefabricated building.
10. The learner will be able to compare prefabricated construction to conventional construction.

PREFABRICATION

Unit 21

Vocabulary

1. Major Module: A unit of measure for modular construction. In the conventional system of units, 48 in. is the length of a major module. In the SI metric system, a major module is 1200 mm long.
2. Minor Module: A unit of measure for modular construction. In the conventional system of units, 24 in. is the length of a minor module. In the SI metric system, a minor module is 600 mm long.
3. Modular Coordination: The dimensioning of a structure and use of building materials based on a common unit of measurement called module.

PASSIVE SOLAR CONSTRUCTION

Unit 22

Objectives

1. The learner will be able to explain what is meant by the "greenhouse effect."
2. The learner will be able to name and explain each of the three methods by which heat travels.
3. The learner will be able to define "thermosiphoning" and explain how this concept is used in active and passive solar heating.
4. The learner will be able to explain "active solar construction" and how it affects the construction of the building.
5. The learner will be able to label a diagram of a commonly used active solar collector and solar system.
6. The learner will be able to explain "passive solar construction" and how it affects construction of the building.
7. The learner will be able to define the word "gain" is regard to solar energy.
8. The learner will be able to name and explain the three types of passive solar energy.
9. The learner will be able to list suitable storage systems and materials for the direct gain type of solar system.
10. The learner will be able to list the major disadvantage of the direct gain system.
11. The learner will be able to diagram the basic design for a direct gain passive solar house.
12. The learner will be able to name the most popular method of storing and

distributing solar heat by the indirect gain method and describe the process involved.

13. The learner will be able to explain the "water wall" method of storing heat.
14. The learner will be able to list advantages of the "isolated gain system" type of solar system.
15. The learner will be able to label a diagram and describe a given isolated gain system.
16. The learner will be able to list advantages of passive solar heating over active solar heating and conventional heating.
17. The learner will be able to list disadvantages of passive solar systems.
18. The learner will be able to describe methods of controlling solar heat.
19. The learner will be able to recommend an adequate control method for solar heat in a given situation.
20. The learner will be able to draw a diagram shouring proper placement of a building for most efficient use of the sun.
21. The learner will be able to explain how the placement of the heating system, solar source, and internal heat affects the efficiency of heat gains.
22. The learner will be able to list the preferred materials for building passive solar structures.
23. The learner will be able to read charts to calculate sizes of thermal storage systems and storage wall thickness.
24. The learner will be able to calculate materials for direct gain storage for a given area.
25. The learner will be able to describe why dark colors are necessary on

the collecting surface.

26. The learner will be able to describe a diagram of a trombe wall.
27. The learner will be able to draw heat rays, given different diagrams of heat convection.
28. The learner will be able to calculate the cross section of the rock bed needed for storage in a passive thermosiphon system; from this, calculate the necessary storage space.
29. The learner will be able to suggest possible insulation to use in a given solar construction.
30. The learner will be able to interpret architectural drawings of solar structures.

PASSIVE SOLAR CONSTRUCTION

Unit 22

Vocabulary

1. Direct Gain System: Passive solar construction in which the sun shines directly into living space to heat it.
2. Indirect Gain System: Passive solar construction in which solar heat is stored in structures of masonry, water, or other medium and then passed along to living space by radiation, conduction, or convection.
3. Isolated Gain System: passive solar construction in which solar generated heat is stored in a separate sun space. It is transported to living space by mechanical means.
4. Passive Solar Construction: Structures of glass, wood, and masonry which collect, transport, and store heat from the energy of the sun.
5. Solar Orientation: Placement of a structure on a building site to get the most benefit of sunlight.
6. Thermosiphon: A Solar collector consisting, in its simplest form, of a flat box. It is glazed on one side. A baffle, parallel to the glazing, divides the box in half. As sun heats the upper half of the box, the heated air moves out one end. cool air moves in from the lower half of the box. The box will be vented either into living space or into ductwork leading to storage.
7. Trombe Wall: Thick wall of masonry placed next to exterior glazing to store solar energy in passive solar construction. Named for a French physicist, Felix Trombe.
8. The Bean (collar beam): A bean so situated that it ties the principal rafters of a roof together and prevents them from thrusting the plate

out of line.

9. Vent: A pipe installed to provide a flow of air to or from a drainage system or to provide a circulation of air within such system to protect trap seals from siphonage and back pressure.
10. Ventilation" The process of supplying and removing air by natural or mechanical means. Such air may or may not have been conditioned.

REMODELING

Unit 23

Objectives

1. The learner will be able to explain what to study before demolition of any kind is attempted.
2. The learner will be able list the steps in tearing out old work.
3. The learner will be able to list useful tools for demolition.
4. The learner will be able to construct a shoring wall.
5. The learner will be able to explain the conditions indicating a bearing wall.
6. The learner will be able to describe how to use a shoring wall to prevent sagging or collapse of the structure.
7. The learner will be able to describe how to provide support when studs are removed to open up a wall.
8. The learner will be able to use charts to size headers in given situations.
9. The learner will be able to compute the load on a header.
10. The learner will be able to describe how to add concealed headers and saddles beams.
11. The learner will be able to describe particular dimensions which must be checked when building additions to older homes.
12. The learner will be able to describe basic steps for replacing an outside door.
13. The learner will be able to describe basic steps for replacing an interior door using jamb clips.
14. The learner will be able to make recommendations regarding use of

solar heat in a remodeled home.

REMODELING

Unit 23

Vocabulary

1. Balloon Framing: A type of building construction with upright studs which extend from the foundation sill to the rafter plate. Its use is decreasing in favor of platform framing and other construction styles.
2. Bearing Partition: A partition which supports a vertical load in addition to its own weight.
3. NonBearing Partition: A partition extending from floor to ceiling which supports no load other than its own weight.
4. Shoring: Lumber and timbers used to prevent the sliding of earth adjoining an excavation. Also the timbers used as temporary bracing or support.
5. Solar Furnace: Another name for a thermosiphon.

SCAFFOLDS AND LADDERS

Unit 24

Objectives

1. The learner will be able to explain the need for "scaffolding" or "scaling."
2. The learner will be able to construct a model of a given type of scaffolding.
3. The learner will be able to construct a scaffolding from prefabricated frames and diagonal braces.
4. The learner will be able to explain why a carpenter uses metal wall brackets.
5. The learner will be able to explain various methods of attaching metal wall brackets.
6. The learner will be able to describe the setup of a ladder jack.
7. The learner will be able to define the use of trestle jacks.
8. The learner will be able to apply all safety rules when building and using scaffolding.
9. The learner will be able to apply basic care and handling rules when using and storing ladders.
10. The learner will be able to request a type of ladder according to the needs of the job being completed.

SCAFFOLDS AND LADDERS

Unit 24

Vocabulary

1. Bracket: A projecting support for a shelf or other structure.
2. Dormer: A projecting structure built out from a sloping roof. Usually includes one or more windows.
3. Jack Rafter: A short rafter framing between the wall plate and a hip, rafter, or a hip or valley rafter and ridge board.
4. Scaffold: A temporary structure or platform used to support workers and materials during building construction.
5. Trestle Jack: A temporary structure or platform used to support workers and materials during building construction.

CARPENTRY - CAREER

Unit 25

Objectives

1. The learner will be able to describe the basic requirements and personal qualifications for a career in carpentry.
2. The learner will be able to describe the need for carpenters in the future.
3. The learner will be able to list job opportunities available for carpenters.
4. The learner will be able to list advantages of a career in carpentry.
5. The learner will be able to list disadvantages of a career in carpentry.
6. The learner will be able to list the courses necessary to enable him/her to enter directly into an apprenticeship training program in carpentry graduation from CIT.
7. The learner will be able to list the general progression from student learner to master carpenter.
8. The learner will be able to explain the apprenticeship period of carpentry training.
9. The learner will be able to explain why it is necessary to keep skills and knowledges up to date.
10. The learner will be able to explain why a carpenter must be competent in reading, writing and speaking.

CARPENTRY - CAREER

Unit 25

Vocabulary

1. Apprenticeship: The formal training period set up under an employer. The term of apprenticeship for the field of carpentry is normally four years.
2. Journeymen: The second stage of trade training when an apprentice completes his training and passed a final exam, he becomes a journeymen, a tradesperson who is fully qualified.

CARPENTRY TERMS - ENGLISH AND NAVAJO

Pine - Nidiish chii

Power Tools - Portable bee na anishi beeshlichi ii bee dadiilt ihigi doo taadit ahigi

Saber Saw - Naneeshtl iizgo bee ni iich iishigi

Electric Drill - bee agha da anili beeshlichi ii bee diilt ihigi

Router - bee na ach aago bee ha iich iiehigi

Reciprocating Saw - nidahontl ahgo bee na iich iishigi

Power Plane - bee adiilkohi beeshlichi ii bee diilt ihigi

Electirc Handsaw - nazbasgo naal wolgo bee ni iich iishigi

Belt Sander - nilch i bee diit ihgo bee il ada alkaligi

Power Nailer - nilch i bee diit ihgo bee il ada alkaligi

Power Tools/stationary - beesh bee na anishi t oo naazhiligi

Radial Saw - woodahdee go naalwolgo bee ni iich iishigi

Motorized Miter Box - nahast ediin doo dizdiin doo bi an ashdlago bee ni iich iishigi

Surfacer - Tsin niheshjii bee diilkoohi

Table Saw - bikaa adani (nahalingo) bikaa ni iich iishigi

Spindle Shapter - Tsin niheshjii bibaahgo neech aahigi

Jointer - Tsin niheshjii bibaago yidiiyilkohi

Types of Planes - tsin bee dadiilkoohi

Jack Plane - tsin bee diilkoohi nineezigi

Block Plane - Tsin bee diilkoohi alts iisigi

Types of squares - bee ida neelaahi

Combination Square - bee ida neel aahi t aa altsoji choo inigi

Sliding T Bevel - t aa altso jo naalkidgo bee ida neelaahi

Line Level - to bii naago i tl ool baah dahnatihigi

Plumbing Bob - beesh tl ool bidiit i go yaago k ehexdon bee bahozingi

Combination Wrench - bee ilhada agizi lahjigo aah at ehigi doo lahjigo nimazigi

Adjustable Wrench - bee ilhada agizi alch i nidigisgi

Open End Wrench - bee ilhada agizi t aa alch ishjigo aah ate ehigi

Box End Wrench - bee ilhada agizi t aa alch ishjigo nimazigi

Drilling & Boring Tool - bee aghada anili

Carpenters Brace - bee aghada anili naalyisgi

Auger Bit - tsin bee bighada anili

Flat Bit - bee aghada anili beeshlichi ii bahigi

Hand Drill - bee aghada anili t aa yila bee naalyisigi

Push Drill - bee aghada anili beesh biniyehigi

Twist Drill - bee aghada anili beesh biniyehigi

Hammers - bee atsidi

Curved Claw Hammer - bee atsidi bijaa ke ehezdonigi

Straight Clas Hammer - bee atsidi bijaa ke ehezonigi

Sledge Hammer - bee atsidi tsoh

Half Hatchet Hammer - bee atsidi alniidoo tseniligi

Types of Files & Knives - bee ach iishi doo beesh al aa adaa t ehigi

Half Round Wood - bee ach iishi niteeligi

Flatwood - bee ach iishi niteeligi

Triangular wood - bee ach iishi taago bidaz neek anigi

Round - bee ach iishi niyizigi

Putty Knife - beesh adahasdzaa bine da di dleeshgo choo inigi

Utility Knife - beesh ta aa altszo go choo inigi

Miscellaneous Tools - bee na anishi na daala cho daa inigi

Wood Chisel - tsin bee nalkali

Nail Set - bee il ada alkaali bee naasgo abida dziiline igi

Chalkline & Reel - tl ool bee iilchihi baahgo bik in nahalyehigi

Pry Bar - beeshbee de ada aline i

Nail Puller - ilada alkaali bee haha nili

Tin Snips - beesht ahi bee nehelgeshi

Bolt Cutter - beesh bee hilghashi

Divider - bee ilts a iidzhi

Hand Broom - bee nahalzhoohi niteeligi

Bench Brush - ts ilzei bee nahidiilzhohi

Sharp Shooter - leezh bee hanalkaadi bichiih heets ozigi

Sand Scoop - Sei bee nageedi

Long Handle, Round Point Shovel - leezh bee hahalkaadi cilatahji hahaash chxii igi doo bitsiin nineezigi

Levels & Wrenches - to bii naago i bee i da neel aahi doo bee ilhada agisi

Carpenters Level - bee is da neel ahi to bii naago i

Builders Level - bii adeest ii go bik ehgo bee i da neelaa doo bik ehgo kin nidaa niligi

Torpedo Level - to bii naago i alts iisigi

Framing Square - beesh nazhahi bee ida neelaahi

Types of Handsaws - t aa yila bee da ach iishigi

Crosscut Saw - bee ach iishi tsenaah bee ni iich iishigi

Rip Saw - bee ach iishi naasii bee ni iich iishigi

Backsaw - biishghaan holoogo bee ni iich iishigi

Compass Saw - bee ach iishi nahazbasgo bee ha iich iishi

Hacksaw - beesh bee nehech iishi

Coping Saw - bee ach iishi alts ozigo bee ni iich iishigi

Types of Scredrivers and Pliers - ilhada agisi doo bee otsagi

Common Scredriver - bee ilhada agisi

Phillip Screwdriver - bee ilhada agisi bilathahgi alna asdzohigi

Linemans side cutting pliers - bee otsagi booshk iizhjigo bee ilghashi

Needlw Nose - bee otsagi bichiih alts oozigi

Combination Slip Joint - bee otsagi t aa altszoji choo inigi

Chanel Lock - bee otsagi naahalyehigi

Types of Clamps - tsin niheshjii alch i bee nideetsahigi

Bar - beesh alch i nidigisigi

Srping - bee otsagi nahalingo bee naa iitsahigi

"C" - naazhago bee alch i nidiigisigi

Band - bin ninaalt ihgo alch k nidiigisigi

Hand - yila bee alch i nidiigisigi

Types of ladder & Measuring Instruments - haaz ei doo bee ida neel aahi

Step ladder - haaz ei alhaa naniilyehigi

Single ladder - haaz ei

Bench Rule - bee ida neel aahi

Folding Rule - bee ida neel aahi ahaa naniil ye higi

Steel Tape - bee ida neel aahi hanadosigi

Title - bizhi

I. Main Heading

t' áálá ágóne íyiisíí baa hwiiní gí

A. Main idea relating to I

t'áwlá a goné í yilsíí baa hwiiní t' í nee
t'wá lá agone' bídeet' i'í gí éí

1. Detail relating to A

A góne' hazáánígí hazhó' ó

bahanégo éí

2. Second detail relating to A

A góne' hazáánígí naakk' góne' hazhó'ó

baanáháne' gó éí

a. Sub-detail relating to No. 2

naaki góne' hazzáánígí

b. Sub-detail relating to No. 2

naaki góné' hazáánígí

hazjóó' baanáháne' go éí

B. Main idea relating to I

t' áála' ágóné' íyiisii baa hwiinít' ínee

naak' goné bínáádeet' i' ígí éí

1. Detail relating to B

bideet' i' í gí honeshanígo, hazhó'ó

bahane' go éí

2. Second detail relating to B

náánála' ákóné'é banááháne'go éí

3. Third detail relating to B

a. Sub-detail relating to No. 3

náánála' ákóné'go éí

eeh banáá háne'go éí

b. Sub-detail relating to No. 3

náá ná la' ákóne' é bahane'

eeh banáá hánego éí

C. Main idea relating to I

t'áála' ágóné' íyíísíí baa hwiiní t'íinee

táá' ígone' é bínáádeet' i' í gí

1. Detail relating to C

bídeet' i' ígí honeshanígo; hazhó'ó

bahane'go éí

a. Sub-detail relating to No. 1

náánála' ákóné'e bahane'

eeh banááháne' go éí

b. Sub-detail relating to No. 1

náánála' ákóé'e bahane'

eeh banááháne' go éí

2. Second detail relating to C

náánála' ákóné'é banááha'ne' go éí

D. Main idea relating to 1

t' áála' ágóné' íviisíí baa hwiinít' íinee

díí'í gone'e bínáá t' i' ígí éí

II. Main Heading

Naaki' góne' í iyilsíí baa hwiinít' ínígí

A. Main idea relating to II

naaki' góné'é iyilsíí baa hwiinít'íinee

t'áálá' á' góne'é bídeet' i' ígí éí

1. Detail relating to A

   bídeet' i' ígí hóneshanígo, hazhó' ó

   bahane' go éí

2. Detail relting to A

   bedeet' i' ígí honeshanígo, hazhó'ó

   bahane' go éí

   a. Sub-detail relating to No. 2

      nááná1a ákóné'é bahane'

      eeh banááhane' go éí

B. Main idea rellating to II

naaki' góné'é íyiisíí baa hwiiní t' ínee

naaki góné'e bináádeet' i' ígí éí

BILINGUAL

VOCATIONAL

EDUCATION

PROJECT

CULINARY ARTS CURRICULUM

CROWNPOINT INSTITUTE OF TECHNOLOGY
Culinary Arts

Introduction:

The primary focal point of the Culinary Arts program is the prepare the trainee as an entry level cook. The role of the Crownpoint Institute of Technology is to provide an adequate background and invaluable work experience for the trainee resulting ulimate in employment.

A course for the teaching of professional cooking consisting of 43 40-hour weeks for a total of 1720 hours.

215 hours Culinary Arts Classroom, Theory & Demonstration

42 hours Classroom English

42 hours Basic Math

1421 hours Programmed Kitchen Laboratory

OBJECTIVES FOR THE TEACHING OF PROFESSIONAL COOKING

Attitude and performance are two major judgements of professional competence andsuccess.

It is recognized that considerable work experience is required to develop the skills and techniques learned in a formal educaitonal situation.

It is a proven fact, however, that a quality foundaiton, a strong professionally oriented basic training program, can consierably reduce the number of years required to develop the skills and techniques necessary for professional competence.

There are a number of fundamental requirements to achievement of professionalism in the food service industry. It is vital that a program of study be aimed at developing in the student.

1. Good work habits.
2. A sense of responsibility toward a job.
3. An understanding and appreciation of the importance of safety, personal hygiene and sanitation.
4. An attitude of respect for, and knowledge of, the use and care of material and equipment.
5. The ability to get along with others and an attitude of cooperation and respect regarding fellow workers, delegated supervisors, and employers.
6. An appreciation of professional competency and a high standard of workmanship.
7. An appreciation of the status and dignity attainable in the food service field.
8. A sense of loyalty and obligation to the public, whom they serve, and the employer who pays their salaries.
9. The ability to master various skills necessary to enter the field at a reasonable level.
10. Interest in further training and education, and advancement of the individual.
11. A constant striving for excellence and effort to help raise American gastronomic standards.

Section I

WHAT IS A CHEF?

General - The learner objectives will be able to gain general background the in general duties of various positions in the kitchen and the job titles associated with the duties.

The learner will be able to recognize what is desirable in a chef and to understand and appreciate the responsibilities of the position and the importance of the chef to the successful conduct of a profitable food operation.

The learner will be able to identify the roles of a chef including organizer, a personnel man and buyer.

The learner will be able to gain knowledge of nutrition and diet and will be able to employ this knowledge in planning menus and personnel in food preparation.

The learner will be able to acquire a knowledable background in kitchen layout design & knowledge of equipment.

The learner will be able to calculate food and labor costs quickly and accurately.

The learner will be able to write letters, reports and written instructions properly.

The learner will be able to communicate effectively with all persons.

The learner will be able to exhibit good physical, mental health and possess great stamina.

COURSE OUTLINE

SECTION I Introduction to the Food Service Industry

What is a chef?
Job Descriptions in the Food Service Industry
How to Get Along with People
Food Handler's Training Program
Dishwashing Procedures
Knife Drill: As Applied Generally
General Kitchen Safety
First Aid
TEST: First Aid and Safety
Heavy Equipment: LECTURE-DEMONSTRATION
Kitchen Equipment (Light)
Basic Nutrition
TEST: Basic Nutrition
Food is Money: Cost Control
Cost Control: Standard Recipes, Food Cost Storeroom
Canned Food Containers Sizes and Capacities
Fomulas and Recipes
Weights and Measures
Coffee Brewing
TEST: Coffee Brewing
Beverage Preparation: Tea and Cocoa
Taste and Flavor: Spices, Herbs, and Seasoning
Culinary Terms

SECTION II The Pantry Department

Salads: Indentification of Salad Greens and Other Salad Vegetables
Salads: Preparation and Storage of Salad Products
Salads: Preparation and Handling, Storage of Fruit, Citrus Fruit, etc.
Salads: General Background
Salads: DEMONSTRATION: Appetizer Salads
Salads: DEMONSTRATION: Accompaniment Salads
Salads: DEMONSTRATION Dessert Salads: Sweet Appetizer Salads
Salads: Objective
TEST: Salads
Salad Dressing: LECTURE-DEMONSTRATION
Salad Dressings
Marinades
Variety Breads
Sandwiches: General
Sandwiches: Preparation and Storage
Sandwiches: Production Methods
Sandwich Preparation: Portioning, Cutting, Arranging, Garnishing
Sandwich Fillings: LECTURE-DEMONSTRATION
Cold Sandwiches

Fancy and Tea Sandwiches
Monte Cristo Sandwich
Sandwich Fillings
Hot Sandwiches: Student Preparation
Sandwich Production: Wrapping for Vending
Sandwiches: Box Lunches
TEST: Sandwich
Dairy Products: Cream, Milk, Cheese and Non-Dairy Coffee Adjuncts
Whipped Cream
TEST: Dairy Products
Ice Cream Products: Ice Cream Desserts and Dispensing
Puddings and Gelatin Desserts
How to Cut and Serve Pies and Cakes

SECTION III Breakfast Cookery

Cereal Cookery
Cereal and Cereal Cookery: Ready to Cook Cereals
Cereal and Cereal Cookery: Fine and Granular Cereals
Breakfast Cookery: DEMONSTRATION
  Preparation of Eggs: "Boiled" (simmered)
  Poached, Scrambled
Breakfast Cookery: DEMONTRATION: Preparation of Eggs: Fried, Omelettes, Shirred
Breakfast Cookery: DEMONSTRATION: Breakfast Meat Cookery: Sausage, Bacon, Ham
Breakfast Cookery: DEMONSTRATION: Waffles, Griddle Cakes, French Toast, Cinnamon Tost
TEST: Breakfast Cookery

SECTION IV Baking

Baking: LECTURE, General Background and Information: Orientation
Baking: LECTURE-DEMONSTRATION: Muffin and Biscuits (Quick Breads)
Baking: DEMONSTRATION: rolls
Baking: Pie Crust and Pies
Baking: Cookies
Baking: Cakes and Icings

SECTION V Stocks

Stocks: General Information
Soups: General Information
Sauces

SECTION VI Thickening Agents

Starches and Starch Cookery: Basic Knowledge
Thickening Agents
Kitchen Practive: Application of Theory: thickening Agents

Preparation of Roux

SECTION VII Vegetable Cookery

Vegetable Preparation and Cookery
Vegetable Cookery: Green Vegetables and Green Leaf Vegetables
Vegetable Cookery: Red Vegetables and Vegetable Plates
Vegetable Cookery: Yellow and White Vegetables
Vegetable Cookery: Potatoes (Breakfast) DEMONSTRATION
Vegetable Cookery: Fresh, Frozen, Canned
Assignment: Vegetable Preparation and Cookery
TEST: Vegetable Cookery
Rice and Farinaceous Products
Pasta Products
Vegetable Cookery: Substitutes: Rice Products
Vegetable and Potato Substitutes: Pastas
Vegetable Cookery: Legumes

SECTION VIII Principles of Cookery

Broiling and Grilling: DEMONSTRATION
Principles of Cookery: Saute and Panfry
Principles of Cookery: Steaming, Boiling, Poaching
Principles of Cookery: Braising and Stewing
Principles of Cookery: Deep Fry
Principles of Cookery: Roast and bake
Principles of Cookery: Review
TEST: Principles of Cookery

Breakdown of Poultry and Related Information.

SECTION IX Meats

Meats: General and Poultry
Meats: Beef
Meats: Lamb
Meats: Veal
Pork and Pork Products: LECTURE
Meats: Variety Meats
Meats: Review
TEST: Meats

SECTION X Seafood: Fish and Shellfish

Seafood: Fish and Shellfish

SECTION XI General TEST

SECTION XII TEST 1 THRU TEST 11

CULINARY ARTS PROGRAM

CROWNPOINT INSTITUTE OF TECH.
P.O. DRAWER K
CROWNPOINT, NEW MEXICO 87313

NAME: ______________________________

Answer the following as completely as possible:

1. Why are you interested in Culinary Arts training?

2. After earning your certificate from CIT will you accept employment off the reservation?

3. Will you be a dorm student or a commuter?
Do you have reliable transportation?

4. Have you had any other vocational training besides high school?

5. Where did you hear about CIT Culinary Arts training?

   Have any of your relatives taken CIT Culinary Arts training?

6. Have you worked in a food service operation before?

   When? Where? What were your responsibilities?

7. CIT Culinary students get more than 80% hands-on-training. Therefore, CIT requires Culinary students to work a rotating shift. Sometimes you will owrk at 6:00 a.m. and get off at 3:00 p.m. Other be given week-end hours. When this happens, you will recieve time off during the week. Fridays you will often work in the afternoons when other CIT students are free to go for the week-end. Can you work these hours?

8. Do you have health or personal problems that may make it difficult for you to complete your training?

9. Do you get along well with others?

*NOTE: You must have a negative TB Test before you begin classes. Bring a written statement from the doctor.

CULINARY ARTS PROGRAM

CROWNPOINT INSTITUTE OF TECHNOLOGY
P.O. DRAWER K
CROWNPOINT, NEW MEXICO 87313

Answer the following:

1. 1/2	2. 3/4	3. 3/4	4. 5
+1/2	-1/2	+1/4	-4 2/3

5. How much is 50% of 10 pounds? ____________________

6. How many onces are there in one pound? ____________________

7. How many quarts are there in two gallons? ____________________

8. Which is larger a pint or a quart? ________________________

9. A customer pays you with a $20 dollar bill. His check is for $16.51.
How much do you give him back in change.? ____________________

10. Multiply: 65 x .45 The answer is ______________.

11. How familiar are you with cooking utensils? Name some.

12. Name three common baking ingredients.

13. What would you do in case of a grease fire?

14. Why is personal hygiene important for a food service worker?

15. Name 3 different examples of food service operations.

CULINARY ARTS PROGRAM GOALS

for Language Arts

The learner will develop skills needed to perform gainful employment, maintenance of personal property and/or leisure time activities.

The learner will acquire knowledge of proper safety practices.

The learner will acquire knowledge relative to career opportunities, how to obtain and retain and retain employment and how to grow professionally in the world of work.

The learner will develop basic leadership, group process and personal living skills.

The learner will understand information through purposeful, critical observation and listening.

The learner will know the basic skills of oral communication through adaptation of speech and writing to different purposes, audiences, and communication forms utilizing the mechanics and conventions of writing and speech appropriately to assure accuracy and clarity in communication.

The learner will comprehend and appreciate reading material.

The learner will enhance writing through appropriate content usage, syntax, and grammatical mechanics.

The learner will increase response to literature through interpretation of literature and the humanities as a reflection of life, values, and ideas.

JOB DESCRIPTION IN THE FOOD INDUSTRY

The learner will be able to list the food service occupations and understand the different positions available in the food industry.

- **Chef**
- **Executive Chef**
- **Sous - Chef**
- **Chef Steward**
- **Working Chef**
- **Chef de Partié**
- **Night Chef**
- **Banquet Chef**
- **Second Cook**
- **Soup Cook**
- **Broiler Cook**
- **Fry Cook**
- **Vegetable Cook**
- **Cooks Helper**
- **Swing Cook - Roundsman - Relief Cook**
- **Garde Manager**
- **Pastry Chef**
- **Assistant Pastry Chef**
- **Baker**
- **Bakers Helper**
- **Butcher**
- **Fish Butcher**
- **Chicken Butcher**
- **Oyster Man**
- **Other opportunities**

How To Get Along With People.

The learner will be able to gain an understanding and appreciation of the importance of getting along with people.

Food Handler's Training Program Hygiene and Sanitation

Objective: Cleaning

The learner will understand and demonstrate the procedures in the following areas.

- Dishwashing
- Contamination of food or how contamination occurs.
- The handling of dishwashing machines.
- Hygiene or personal health.
- Food protection, storage and handling.
- Customer Service
- Insects and rodents.
- Disposal of waste, garbage and refuse.
- Good housekeeping
- Care and handling of equipment.
- Nutrition
- Cleaners and sanitizers.
- Communicable disease
- Laymen's bacteriology
- Food Supply Sources.
- Local laws and ordinances.

The learner willbe able to recognize optimum sanitary conditions and apply knowledge of sanitary conditions to any situation as well as follow safety procedures posted in the kitchen.

A. Lecture concerning the importance of sanitation in the kitchen and explanation of the dress code requiring workers to wear hats, hairnets, and clean aprons.

B. Illustration of the importance of properly washing hand before working with food.

The learner will be able to demonstrate the above given food service areas in which violations of sanitation rules exist and a checklist on which to report findings, inspect for violations of sanitation laws.

METHODS:
1. Obtain checklist from instructor.
2. Inspect the food service area.
3. Record findings on checklist.
4. Give checklist to instructor.

The learner will be able to clean metal surfaces--stainless, aluminum, cast iron.

- Assemble cleaning supplies according to type of metal.
- Remove heavy soil/spillage.
- Prepare cleaning solution according to type of metal.
- Scrub surface.
- Rinse surface.
- Wipe dry.

The learner will be able to clean formica surfaces.

- Assemble cleaning supplies.
- Brush away loose soil.
- Scrub surface.
  (NOTE: Abrasive cleaners should not be used.)
- Rinse.
- Remove excess water.
- Wipe dry.

The learner will be able to clean wood surfaces.

- Assemble cleaning supplies.
- Vacuum/brush away loose soil.
- Remove marks or stains.
- Wash surface.
- Rinse.
- Wipe dry.
- Shine surface.

The learner will be able to clean marble surfaces.

- Assemble cleaning supplies.
- Vacuum/brush away loose soil.
- Scrub surface.
- Rinse.
- Air dry.

The learner will be able to clean tile surfaces.

- Assemble cleaning supplies.
- Vacuum/brush away loose soil.
- Remove stains/marks/soil.
- Clean grouting.
- Rinse.
- Wipe dry.

The learner will be able to clean glass surfaces.

- Assemble cleaning supplies.
- Clean glass frame.
- Clean glass.
- Rinse.

- Remove excess water.
- Wipe dry.

INFORMATION SHEET

Much of our knowledge concerning bacterial food-borne illnesses indicate that our problems arise from mishandling of food - (1) incorrect food preparation, (2) improper holding, (3) improper storage and/or (4) incorrect serving techniques. Here are some basic rules which can be used as guidelines in the handling of food to prevent food contamination:

Food Preparation

1. Preparation procedures should allow time for foods to thaw in the refrigerator rather than at room temperature.

   Example: Before the cooking stage, poultry and meats should be thawed in the refrigerator until totally defrosted.

2. Foods being prepared should be kept out of DANGER ZONE temperatures as much as possible.

   Example: Ingredients to combined (such as eggs, milk products, and meats) should be kept cold until just before use in preparation. After preparation, foods should be either cooked or refrigerated again immediately.

3. Procedures established for food preparation should include standards of cleanliness.

   Example: Certain foods should be washed before use. Employees are expected to be neat and clean. Preparation areas must be regularly cleaned.

4. Meats should be cooked to inside temperatures necessary to control growth of micro-organisms.

   Example: Pork is cooked to 165 F (74 C) and meringue to 425 F (218 C).

5. Milk and egg products must be cooked throughly.

   Example: Cream fillings are cooked to 165 F (74 C) and meringue to 425 F (218 C).

6. Do not dip fingers into foods for tasting. Us a clean spoon; and when it is used once, wash it before using again.
7. Inspect perishable (easy to spoil) foods before using.
8. Use a spoon to recover anything which has fallen into a food.
9. Avoid setting dirty cartons or boxes on food preparation surfaces.
10. Do not use equipment or utensils/tools which have fallen on the floor (without washing them).
11. Use clean plastic gloves when mixing or serving food.

Food Holding

1. Procedures must be established to prevent bacterial growth in foods being held for service.

   Hot Foods - Should be held at temperatures higher than 140 F (60 C), 145 - 155 F.

   Cold Foods- Should be kept below 40 F (7 C), 35 - 40 F.

2. Cooked foods must be moved quickly into cold storage. Foods should not be allowed to cool at room temperatures before being placed under refrigeration.
3. Special attention should be given to holding of foods in which bacteria multiply most rapidly.

   Examples: Custards, milk, cream, ice cream, seafoods, meats, eggs, meat products, shellfish, salads, mayonnaise, salad dressings poultry, stuffings, bread puddings, cream pies, eclairs, and filling pastry.

4. By placing food in the refrigerator, the food service worker does not eliminate the danger of contamination and growth of microorganisms. The refrigeration unit must be capable of quickly bringing the temperature of the food, in the particular quantity and form, to an acceptable level.

   Example: A food service worker who places 20 gallons of chicken in cream sauce in a refrigerator or freezer. This procedure would require 24 hours to reduce the temperature of the entire batch to less than 40 F and accomplish very litte.

Food Service

1. Separate food into cold (wet) and dry storage.
2. Cold Storage areas must be kept at a constant low temperature to prevent the growth of microorganisms.
   - Freezers should be kept at 0 F (-18 C)
   - Refrigerators should be kept at 0 F (-18 C)
3. Refrigerators and freezers should never have more than ____ inch of frost. More than this amount would not allow for adequate cooling.
4. Canned foods must be kept in an area where they are not exposed to high temperatures that can cause bacterial growth in the container.
5. Dry storage areas should be kept free from pests, moisture, and cluttered traffic pathways. This may be accomplished through:
   a. Pest control continued on a regular basis,
   b. Food stored at least one foot off the floor away from any possible collection of moisture, AND
   c. Location of storage area away from kitchen movements or business.
6. The cold and dry storage areas should be cleaned on a regular basis to prevent microorganism development.

7. Plan production for fewer leftovers and discard questionable leftovers.
8. Spread out cooked foods in shallow pans for rapid cooling. Refrigerate promptly.
9. Use leftovers the next day or freeze for later use.
10. Keep refrigerators for milk, meat and perishables (easy to spoil foods) at 40 F or below.

Serving Foods

1. Hands should be throughly washed before food is handled.
2. NEVER lick fingers or thumbs when preparing and serving foods.
3. Avoid putting fingers in hair because they can become contaminated.
4. Always wear a hairnet or cap when working in the food serving area, to keep hair from getting into food.
5. Do not chew gum near the food preparation and serving area.
6. Do not touch the "eating end" of forks, knives and spoons used in preparing foods, serving patient trays or setting tables for dining room service.
7. Handle bowls, glassware and cups properly.
    a. Do not touch rims of glassware and cups.
    b. Do not put fingers inside mixing bowls, plates and saucers.
8. Use tongs for:
    a. Placing ice in glasses or pitchers.
    b. Serving pastry, rolls, doughnuts or butter.
9. Serve hot foods hot, and cold foods cold.
10. Do not wear nail polish.

Directions: Read the statements below carefully. Identify the improper food preparation/handling technique and explain the proper practice needed. Write your answers in the space provided.

1. The manager told an employee to taste the clam chowder. The employee tasted the clam chowder with the same spoon that was used to stir it.

2. Henry's job was to mix the 50 pounds of ground beef for the meat loaf. Since Henry was a little behind schedule, he decided to use his hands to save time.

3. Beth had a terrible cold and was coughing and sneezing while cutting the roast beef for sandwiches.

4. The food service class was going to prepare turkey the next day in class, so the instructor took the bird out the night before and left it on the work table/counter to be sure it would thaw out.

5. Jim went to the storeroom to get some green beans. He noticed a can that looked pretty old, because it was leaking and rusted on top. He decided he'd better use it up before it made a bigger mess.

6. Pete has a nasty cut on his hand, but told his boss he'd cove it with a bandage before he began serving pototoe chips in the cafeteria line.

7. The spaghetti sauce was cooked and ready for tomorrow's lunch. The students decide to let it cool down before putting it in the refrigerator to save energy.

Directions: Identify the correct temperature range for holding these hot and cold food items. Place the correct letter in the blank provided.

Food Items

_____1. Roast beef
_____2. Milk
_____3. Egg Salad
_____4. Slaw
_____5. Fried Chicken
_____6. Sliced Tomatoes
_____7. Pinto beans
_____8. Vegetable soup
_____9. Fruit Salad
_____10. Tuna fish salad

Temperature

A. 145 - 155 F (or above)
B. 35 - 40 F (or below)

Directions: Match the following foods with their correct storage area. Write your answer in the space provided. NOTE! Each storage area may be used more than once.

FOOD

_____1. Cheese
_____2. French fries
_____3. Salad dressing
_____4. Egg Salad
_____5. Fish Fillet
_____6. Lettuce
_____7. Mayonnaise
_____8. Spices
_____9. Flour
_____10. Tartar sauce
_____11. Bananas
_____12. Leftover roast beef
_____13. Fruit juice
_____14. Milk
_____15. Coffee

STORAGE

A. Refrigerator (wet)
B. Storeroom (dry)
C. Freezer (wet)

DISHWASHING PROCEDURES

The learner will be able to acquire knowledge of basic dishwashing procedures; for student to learn operation of dish machine in specific training school in which courses are being given so that he may participate in future sanitation and cleaning schedule.

The learner will be able to operate a dishwashing machine.

A. Instructor demonstrates how to rinse and scrape dirty dishes.

B. Discussion of State Department of Health regulations which affect machine dishwashing.

   1. Temperature of Water

   2. Chemicals

   3. Drying

C. Instructor demonstrates loading dishwasher, adding detergent, and unloading dishwasher.

D. Student pratices correct procedures for machine washing.

The learner will be able to follow correct procedures in handwashing pots and pans.

A. Student observes a worker carrying on the task of handwashing.

B. Student practices correct procedures for handwashing.

KNIFE HANDLER'S TRAINING PROGRAM:

Objectives:

The learner will be able to master the principles and techniques of knife handling as the factors of skill and safety must be adhered to.

The learner will be able to:

- Describe and use hand tools.
- Demonstrate of Techniques.
- Demonstrate and Practice: Positions, basic grips, etc.
- Drill basic grips, techniques;
- To Sharpen and Maintain Knives (Use of Stone and Steel).
- Demonstrate cutting techniques and review, etc.
- Conduct a Knife Drill and Use of Steel.

GENERAL KITCHEN SAFETY

The learner should be able to apply safe work habits and the principles of accident prevention through work in the kitchen. This knowledge will be evidenced through demonstration and by scoring 100% on the unit test.

Specific Objective: After completion of this unit, the student should be able to:

1. State the cardinal rules of safety.
2. Describe the physical characteristics of a safe storeroom.
3. List rules of restoring supplies safely.
4. List rules for preventing burns.
5. Tell how to prevent electrical shock.
6. Discuss rules for preventing falls.
7. Name rules for preventing cuts.
8. List rules for using knives safely.
9. Discuss safety with cleaning materials.
10. Describe safe clothing for the kitchen.
11. Complete safety check sheet.
12. Demonstrate the ability to life a heavy item properly.

I. CARDINAL RULES OF SAFETY

(NOTE: Safety is everyone's job. It is a responsibility that never ends.)

A. If you drop it, pick it up.

B. If you spill it, wipe it up.

C. Keep your mind on what you are doing.

II. PHYSICAL CHARACTERISTICS OF SAFE STOREROOM

A. Shelves

1. Strong
2. In good repair
3. Wide enough to hold items

B. Aisles

1. Wide enough for freedom of movement
2. Clear of objects
3. Well lighted
4. Floors clean and dry

C. Size

1. Suitable for amount of stock to be stored.
2. Separate storage area for chemicals and cleaning materials.

D. Appropriate ladder

III. STORING SUPPLIES SAFELY

A. Remove all nails and staples when opening boxes, carton, or barrels (NOTE: Do not just bend them down).

B. Be careful of splinters when opening wooden boxes.

C. Dispose of all empty cases and boxes promptly.

D. Use a strong, well-braced ladder when removing items from high shelves.

E. Stack heavy items on lower shelves.
F. Stack items on shelves, never directly on floor.
G. Store insecticides, cleaning materials, and other contaminants away from food stuffs.
H. Maintain good housekeeping to reduce the hazard of fire.
I. Never store items in front of fire-fighting equipment.

IV. PREVENTING BURNS

A. Use DRY towels or hot pads to handle hot utensils.
B. Life covers of hot pans away from self.
C. Stand to the side when opening steamers and ovens.
D. Keep pot handles out of aisles.
E. Keep pot handles away from flames.
F. Do not use your apron as hot pad.
G. Fill containers to proper level.
H. Get help when moving heavy hot items.
I. Warn people when placing a hot pot close to them.
J. Avoid dropping wet foods into hot fat.

V. PREVENTING ELECTRICAL SHOCK

A. Be sure electrical outlet is grounded before plugging in a cord.
B. Report all defective equipment and worn or frayed electrical cords.
C. Avoid water when working with electricity.
D. Unplug equipment before cleaning.

VI. PREVENTING FALLS

A. Always be able to see where you are doing.
B. Keep floors dry and free of grease.
C. Keep aisles clear of obstructions.

D. Keep all equipment doors and drawers closed.

E. Pick up things that you drop.

F. Wipe up things that you spill.

G. Use a ladder to reach objects out of reach.

H. Be careful going around blind corners.

I. Warn people when passing behind them.

VII. PREVENTING CUTS

A. Pick up broken glass slivers with a heavy damp paper towel, never with the hands.

B. Dispose of broken glasses and dishes cautiously (Note: Dispose of broken glass in separate container for special handling).

C. Replace all pieces and parts after cleaning equipment.

D. Use all safely devices on equipment.
(Examples: slicers and grinders)

E. Use can openers that are in good repair and be cautious of edges on opened cans (NOTE: Notify supervisor of nicked can opener blades.)

F. Keep fingers away from all moving parts of equipment.

G. Discard all chipped or cracked dishes.

H. Never reach into water to remove broken glass.

I. Do not work foods too close to the cutting surface when grating.

VII. USING KNIVES SAFELY

A. Keep your mind on what you are doing when handling a knife.

B. Never drop a knife in soapy water.

C. Get out of the way if a knife falls.

D. Do not try to catch a falling knife.

E. Carry knives by their handles with tips pointed down and with cutting edges away from the body.

- F. Use a cutting board at all times.
- G. Keep the sharp edge away from when drying a knife.
- H. Store knives in racks, never loose drawer.
- I. Cut away from body and co-workers.
- J. Always use a sharp knife

  (Note: Sharp knives are safer than dull knives. They cut more easily and take less pressure.)
- K. Never leave knives where they cannot be easily seen.
- L. Wash knives by themselves.
- M. Use knives for their designated purposes, never to pry up or open lids or cans.
- N. Select the right knife for the job to be done.
- O. Keep knife handles free from grease or other slippery material.

IX. SAFETY WITH CLEANING MATERIALS

- A. Read the directions on the labels.
- B. Store materials away from food items.
- C. Always wash hands thoroughly after using chemicals.
- D. Always wear appropriate safety equipment.
- E. Never use materials where they may contaminate food.

X. SAFE CLOTHING FOR THE KITCHEN

- A. Shoes
  - 1. Rubber heels to prevent slipping
  - 2. Safety toes or closed toes.

    (Note: Never wear sandals or canvas topped shoes.)
  - 3. Tied to prevent tripping over shoelaces.

4. Broad based heel to provide balance.

   (Note: The heel should not be over two inches high.)

5. Good strong support for comfort.

B. Uniforms

1. Wear suitable uniform for kitchen or dining room.
2. Tie apron strings securely and short

   (Note: Long ties may be caught in equipment.)

3. Do not wear necklaces which may get caught in equipment.
4. Keep uniform free from pins and jewelry which may drop into the food.
5. Wear uniform made of flame resistant material.

Hand Tools

Objectives:

The learner will be able to gain general background regarding knives and hand tools and understand the usese peculiar to specific tools and to know the names of the tools.

The learner will be able to respect for safety rules regarding tools to safeguard himself and others.

The learner will be able to recognize:

1. Product quality
2. Time
3. Labor
4. Accuracy
5. Safety

in the operation of hand tools.

The learner will be able to understand the importance of safety to himself and others; for student to know the basic precepts of safety; for student to understand and appreciate the benefits derived from observing safe practice.

FIRST-AID

The learner will be able to develop an awareness of the importance of clear thinking in applying first aid and in action in emergencies.

The learner will be able to gain general background in correct first aid procedures and to establish a source of ready reference for this knowledge.

The learner will be able to recognize understand administer first aid under the following conditions; Wounds, Shock, Artificial Respiration, Poisoning by Mouth, Injuries to Bones, Joints, Muscles, Burns, Effect of Heat and Cold, and Common Emergencies.

HEAVY EQUIPMENT

The learner will be able to gain basic knowledge of heavy equipment, its use, care, and cleaning to learn the rules of safety as specifically related to various pieces of equipment in the kitchen and preparation and storage areas.

LIGHT EQUIPMENT

The learner will be able to list the names of various pieces of light equipment, including pots, pans, etc., so that he may readily identify them.

The learner will be able to demonstrate the specific and general uses of various pieces of light equipment to enable him to select the right equipment for various aspects of food preparation.

The learner will be able to appreciate the considerable financial investment in light equipment and to encourage due care and handling.

BASIC NUTRITION

The learner will be able to recognize the importance of good nutrition and for the student to know what nutrition means to recognize the four food groups and ten "leader" nutrients and to know their relation to good health.

FOOD COST

The learner will be able to recognize that food merchandise is money, only in a different form; and to create in the worker an awareness of the importance of controlling costs and how this may be accomplished.

The learner will be able to:

- Accurately predict what the customer (or guest) is going to buy.
- Purchase and prepare raw materials based on the above prediction.
- Portion products skillfully and accurately to avoid excessive costs.
- Eliminate waste and loss from the time food products (and beverages) are purchased by the restaurant until they are sold to the customer.
- Plan or follow planned production.
- Control of portion sizes.
- Reduce cooking and carving losses.
- Eliminate spoilage through proper handling and storage.

STANDARD RECIPES, FOOD COST, CONVERTING RECIPES

The learner will be able to follow a recipe in the preparation of a food item so a uniform product is produced.

The learner will be able to prepare a dish within the preparation period from a given recipe with 90% accuracy and so a useable uniform product is produced according to the opinion of the vocational instructor.

The learner will be able to demonstrate cost control in the preparation of food products; and to learn the principles of following standardized recipes and converting recipes to yield different amounts.

The learner will be able to;

- Calculate cost of each ingredient in them.
- Calculate cost of packaging item.
- Calculate overhead.
- Calculate salary.
- Calculate other direct/indirect cost.
- Add total of steps one (1) through five (5).
- Add in profit margin.
- Price identical product sold by competition.
- Adjust price to be competitive.

The learner willbe able to;

- Check stock inventory.
- List out-of-stock items.
- Check list of future orders to be filled for needed ingredients.
- List products needed.
- Record quantity, brand, quality, and cost of each product needed on purchase order.
- Submit purchase order for approval.

- Forward purchase order to supplier.

STOREROOM

The learner will be able to gain general background knowledge of storeroom operation and procedure and to recognize the reasoning behind various methods of control.

The learner will be able to know functions of this department and its general organization and to become familiar with procedures for requisitioning merchandise to be used by the kitchen and other producing departments.

The learner will be able to realize importance of maintaining physical control of merchandise as well as financial control.

The learner will be able to;

- Gather items to be stored,
- place items to be stored on mobile unit,
- store items for temporary use in temporary storage area,
- store items requiring central storage in appropriate assigned area,
- and store pots and pans in individual work centers.

The learner will be able to

- record all incoming items,
- check list of incoming items against order form, and
- report any discrepancies to your instructors.

The learner will be able to

- Count all items.
- Record count.
- Record items by food category.
- Record size or weight of container of each item.
- Total supplies on hand by food category.

The learner will be able to

- check that items are free of insect infestation,
- prepare items for storage,
- sort supplies according to use, (janitorial, dry goods),
- place items in/on storage area(s),
- remove empty containers/bags to trash, and
- clean spills/breakage.

CANNED FOOD CONTAINERS SIZES AND CAPACITIES

The learner will be able to recognize canned food container sizes and capacities common to the food service business.

CAPACITY OF CANNED FOOD CONTAINERS

Size of Can	Content (Ounces)	Content, Cups (Approx.)	Approximate Average Weights
No. 300	15.0	1 3/4	14 to 16 oz. specialty items
No. 303	16.6	2	16 to 17 oz. veg., some fruits, juice, special products
No. 2	19.9	2 1/2	1 lb. 4 oz. fruits, vegetables and juices
No. 2 1/2	28.5	3 1/2	1 lb. 13 oz. fruits, some
No. 3 cyl.	46.0	5 3/4	3 lb. 2 oz. fruit juice, tomatoe juice, spec. products
No. 10	103.7	12 3/4	6 lb. 10 oz. vegetables, fruits special products

The learner will be able to demonstrate how to substitute one can size for another to achieve the same approximate yield.

FORMULAS OR RECIPES

The learner will be able to slate what a formula-recipe is; to understand the construction of a formula-recipe; to understand and know how it is to be used. For student to understand the term, "standare" and to recognize the relationship of standards to formulas and/or recipes; and to understand the values derived from following these professional practices.

The learner will be able to list the requirement of a recipe including:

The name of the dish to be prepared.

The formula number if a number has been assigned.

The yield or number of portions the recipe is for.

A list of all ingredients based on the sequence of preparation steps.

Weight or volume measurements (or both) should be given.

Each step in the method, in order of performance, including:

A. Cooking temperature

B. Cooking time

Method of service, including;

A. Portion size if not otherwise indicated in yield.

B. Garnish and other factors, such as method of plating, etc.

Additional factors, such as altenate service or garnish, method of holding for service, and related information.

The learner will be able to follow a recipe exactly through demonstration

WEIGHTS AND MEASURES

The learner will be able to define the necessary terminology and basic principles of weighing and measuring; and to understand their importance to successful food preparation.

The learner will be able to accurately use the following charts in food preparation.

3 teaspoons	1 Tablespoon	1/2 fluid ounce
1 cup	16 Tablespoons	8 fluid ounce
2 cups	1 pint	16 fluid ounce
2 pints	1 quart	32 fluid ounce
4 quarts	1 gallon	128 fluid ounce

Abbreviations:

t.	teaspoon	pt.	pint
T.	Tablespoon	qt.	quart
c.	cup	gal.	gallon

The learner will be able to convert each ingredient in the recipe to 5 times the original recipe.

The learner will be able to convert each ingredient in the recipe to one-half the original recipe.

COFFEE BREWING

The learner will be able to demonstrate the fundamentals about good coffee making.

The learner will be able to prepare one pot each of coffee by steeping, dripping, percolating, and vacuuming. The coffee must have good clear color, pleasing flavor and aroma, with no floating grounds. Performance will be judged by the instructor.

Gather appropriate equipment and supplies. Place coffee in each container, using appropriate grind per method used. Add liquid as required per method. Brew. Taste and flavor:

SALADS SECTION II

The learner will be able to recognize various salad greens and vegetables by sight and be able to name them.

- Know general and specific uses of these products.
- Develop an awareness of standards of quality and condition.

The learner will be able to prepare at least one each of the following types of salads: an appetizer, main course and a side dish. The salads must be eye appealing, colorful, palatable and of good texture. As an appetizer, the salad should not satisfy the appetite, but be light in character and appealing. As a side dish, the salad should offer contrast with the rest of the dinner without being too sweet. The main course salad should be any reasonable combination of fish, meat, vegetables, dairy, gelatin or other products that have good texture, flavor and color. Performance will be rated by the instructor. (3)

Using a standardized recipe per salad type, necessary ingredients and supplies, the learner will be able to make an appetizer, a main course, and a side dish with at least 90% accuracy.

METHOD:

1. Gather supplies and ingredients.
2. Use quality ingredients.
3. Prepare ingredients to be used in salad as required by recipe.
4. Combine ingredients as required by recipe.
5. Follow other instructions.

SPECIFIC:

The learner will be able to use proper techniques to prepare at least one each of the following types of dressings: French, mayonnaise, and cooked.

METHODS:

1. Gather supplies and ingredients.
2. Mix ingredients according to recipe.
3. Cook, if applicable.

SALADS: Preparation and storage of greens and other salad products.

The learner will be able to learn the correct procedures for preparing greens and other salad vegetables.

The will be able to appreciate the factors of appeal palatability, health and sanitation in relation to preparation and storage methods.

The will be able to learn specifically the proper method of washing salad greens and storing them prior to service.

SALADS: PREPARATION AND HANDLING, STORAGE OF FRUIT: Citrus Fruit, etc.

The learner will be able to gain background information in the preparation, handling and storage of fruits and specifically to learn how to section grapefruit and organes and how to prepare melons, pineapple, apples, pears, and other fruit for service or for food preparation within the pantry and salad department.

The learner will be able to:

1. Name the four salad categories as outlined in The Professional Chef.

   a) Appetizer b) Accompaniment c) Main Course d) Dessert

2. Name one salad representative of each category.

   a) fruit cup, shrimp cocktail, chopped chicken livers, etc.
   b) hearts of lettuce, mixed green salad, pear and cottage cheese
   c) tomato stuffed with chicken salad, fruit salad plate, etc.
   d) jellied fruit mold, gingerale salad mold, etc.

3. Name at least six basic principles and factors related to good salads as stated in the text.

a) quality of ingredients; b) eye appeal; c) simplicity;
d) neatness e) contrast and harmony; f) proper food combinations;
g) flavorful, etc.

4. Name the four basic parts of a salad:

a) Base	b) Body	c) Dressing	d) Garnish

5. Briefly define each part.

SALADS: Demonstration: Appetizer Salads

The learner will be able to learn various aspects of pantry and salad preparation including non-salad products that are commonly associated with this department.

The learner will know how to prepare and serve the non-salad items included here and to recognize the sanitation and health factors affecting their service.

The learner will create a further awareness of the need for observing safe practices when handling sharp tools and instruments.

SALADS: Demonstration

The student will learn principles and techniques of preparing main course salads.

MAIN COURSE SALADS: Avocado Stuffed with Crabmeat, Fruit Salad Plate (as desired), Cold Cuts with Potato Salad (Potato Salad), Chef's Salad with Julienne of Ham, Cheese and Chicken.

SALADS: DEMONSTRATION: Accompaniment Salads

The student will be able to discuss accompaniment salads commonly found in all types of food operations. Techniques will be demonstrated as items are prepared.

- Hearts of Lettuce, Macaroni and Ham, Garden Salad, Sunset Salad, Pineapple and Cottage Cheese, Lime-Pear Aspic.

- Waldorf Salad, Cole Slaw, Cole Slaw Souffle, Vegetable Salad ala Russe, Avocado and Grapefruit.

SALADS: Demonstration: Dessert Salads: Sweet Appetizer Salads

- Shrub, Fruit cup, Baked Grapefruit, Gingerale Salad

The student will be able to supplement earlier learning about dessert salads and sweet appetizer salads. For student to know aspects of preparation necessary for his participation.

SALADS: The learner will know the basic principles and factors relating to good salads and their relation to the menu. For the student to understand and appreciate the aspects of eye appeal; texture and color contrast; artistic touch; and flavor and harmony of combination.

Salads will be categorized as:
- a) Appetizers
- b) Accompaniment salads
- c) main course salads
- d) dessert salads

QUIZ

1. Name the four salads categories as outlined in The Professional Chef.
2. Name on salad representative of each category.
3. State at least six basic principles and factors related to good salads.
4. Name the four basics parts of a salad.
5. Briefly define each part.
6. How should the garnish relate to the salad?
7. How does salad preparation offer an opportunity for imagination and artistic talent?
8. Name as many garnishes as you can that are related to fruit and salad and gelatin salads.
9. Name as many garnishes as you can that are related to other salads.
10. What considerations should we follow in planning salads for the menu?
11. What considerations should we follow in planning a salad for a specific menu, such as a single entree banquet menu?
12. Should sweet salads be served at the beginning of a meal? State your reasons.
13. Is measurement of ingredients necessary in salad preparation? State your reason.
14. How might this affect yield and portion sizes?
15. Name as many salad greens as you can.
16. How would you explain them or identify them to someone without a picture?
17. How does the season affect availability and price of salad greens?
18. How may it affect quality?
19. Do you think that these factors may vary in different parts of the

country? How?

20. State the procedure for the preparation of salad greens to be used for salad.
21. How might these procedures relate to vegetable cookery?
22. Why is it recommended that tomatoes be added to some salads as near serving time as possible?
23. How can discoloration or darkening of some fruits and vegetables be retarded?
24. Why are stainless steel tools recommended for fresh fruit prepartion?
25. Name as many fruits and vegetables as you can that used in salad preparation.
26. Name as many dairy products as you can that are used in salad preparation.
27. State basic procedures in the mass production of salads.
28. How do the procedures you suggest differ from individual or ala carte prepartion?
29. What is the recommended method of ripening tomatoes?
30. How should melons be handled and stored?
31. How does refrigeration affect the ripening of fruits?
32. What type of ware is generally recommended for storage of salad ingredients?
33. What considerations should be followed for diet conscious patrons?
34. How does the ratio of gelatin to liquid affect the quality of a gelatin salad?
35. In addition to the gelatin-liquid ratio, what other factors may affect the formation of the gel?
36. How does whipping a gelatin product affect its volume? Its power to

gel?

37. What is gelatin?

38 Why it is recommended that plain or unflavored gelatin be soaked in cold water prior to mixing with liquid ingredients of a salad?

39. Can you think of any other way that gelatin might be incorporated? State your thinking.

40. What may happen if plain gelatin is mixed with boiling water or extremely hot water?

41. What is the approximate temperature at which gelatin dissolves?

42. What is Jell-O?

43. Is it necessary to use accurate measurements when using gelatin or flavored gelatin? Why?

44. In what forms may gelatin be purchased?

45. What other forms of cookery utilize gelatin in a manufactured form?

46. Make a list of the fruit and gelatin salads on the basic menus.

47. Make a list of salads using meat, fish, and poultry.

48. Make a list of salads using farinaceous products, such as rice or pastas.

49. Make a list of salads using dairy products.

50. What considerations should be made when selecting canned fruits for salad preparation?

Name ____________________________ Print answer for questions in space.
Instructor ______________________ provided. Circle correct answer for
Date ____________________________ True-False questions.

TEST: Salads Point Value

1. Name the four categories of salads as listed in The Professiobal Chef. 12

a) _______________ c) _______________

b) _______________ d) _______________

2. Name the four basic parts of a salad:

a) ________ b)________ c)________ d)________

3. Name one salad representative of each of the categories (question 1). 8

a) _______________ c) _______________

b) _______________ d) _______________

4. Fresh fruits, such as bananas, apples, and pears should be cut with a _______________ knife to prevent discoloration. 4

5. The two most important basic dressing are: 8

a) _______________ b) _______________

6. Unflavored or plain gelatin should be soaked in __________ water when preparing gelatin salads. 4

7. Name the two most important ingredients in French Dressing. 8

a) _______________ b) _______________

8. Name four basic ingredients in mayonnaise. 8

a) _______________ c) _______________

b) _______________ d) _______________

9. Too little gelatin produces a soft, sloppy salad. T F 4

10. Gelatin sets more rapidly at cold temperatures. T F 4

11. When gelatin is whipped, its volume increases. T F 4

12. When gelatin is whipped, its power to gel is reduced. T F 4

13. Acid juices such as grapefruit juice and lemon juice aid in preventing discoloration of cut apples and pears, etc. T F 4

14. Salad dressing or "boiled" dressing, as it is often called contains a very high percentage of oil. T F 4

15. Since salads play a minor role in food preparation, accurate measurement is not important. T F 4

16. Lettuce improves in quality if stored in water before using. T F 4

17. Mayonnaise and French dressings are important because they serve as a base for nearly all other dressings. T F 4

18. Clean salad plates should be stored under refrigeration for a short while before using. T F 4

QUIZ: Salad Dressings

1. What are the three main categories of salad dressing?
2. Which ones contain oil?
3. Which ones contain eggs?
4. May French dressing contain eggs? Explain.
5. What function do eggs perform inthe preparation of mayonnaise?
6. What are the other ingredients in mayonnaise?
7. What are the ingredients in French dressing, exclusive of spices and seasonings?
8. What are some of the suggested spices and seasonings that may be used?
9. What is an emulsion?
10. What is the difference between an emulsion, such as a basic French dressing and mayonnaise?
11. How does the quality of a salad oil affect the quality of a dressing?
12. What are some of the types of oils used?
13. How may oils contribute flavor to a dressing?
14. What is olive oil? What is the highest quality called and how is it derived?
15. What are the major types of vinegars?
16. What is their source?
17. What is an average acid strength for cider vinegar?
18. How may this relate to some types of vegetable preparation and cooking?
19. What is an average ratio of oil to vinegar in French dressing?
20. Are substitutes sometimes used for vinegar in French dressing? Explain.
21. What is mayonnaise?
22. How do government regulations affect the composition of commerically

prepared mayonnaise?

23. How may the temperature of the oil affect the preparation of mayonnaise?

24. What approximate temperatures are recommended for preparing mayonnaise?

25. How does the use of whole eggs compare with the use of egg yolks in the preparation of mayonnaise?

26. What is one of the main reasons for the use of fresh eggs in the preparation of mayonnaise? Are there any other reasons?

27. How may the method of adding oil affect an emulsion?

28. How may acid affect the thickness or viscosity of an emulsion?

29. When may the acid, such as lemon juice or vinegar be added?

30. How may separation or "breaking" of mayonnaise be corrected?

31. How should mayonnaise be stored?

32. Give the steps in proper sequence, for the making of mayonnaise.

33. What is "boiled" dressing?

34. How does it differ from mayonnaise?

35. How does it compare in flavor? Does this make it more suitable for any type of product in particular? Explain.

36. State the procedure for making boiled dressing.

37. Why is it suggested that dressing be added to many salads immediately prior to service?

38. How may French dressing be emulsified?

39. What would be the advantages?

40. State some of the principles to be considered when selecting the appropriate dressing for a salad.

SALAD DRESSING: Lecture-Demonstration

The student will learn various aspects of salad dressing preparation and its relation to salads.

The student will learn through demonstration, the principles and methods of making mayonnaise, French dressing, and "boiled" dressing and their variations.

The student become familiar with the ingredients used in the preparation of different kinds of salad dressings.

The student learn various aspects of salad dressing preparation and its relation to salads.

The student become familiar with ingrediants used in the preparation of different kinds of salad dressings and to know and understand their use.

The student learn through reading, demonstration, and participation, the principles and methods of making mayonnaise, French dressing, boiled dressing; variations of these product; and others.

MARINADES

The student will understand the principles and purposes of marination; to know the composition of various marinades; and to gain a general knowledge of the application of the products and process.

Classification of marinades:
1. oil and acid mixtures
2. oil and spice mixtures
3. acid and spice mixtures
4. salt and liquid mixtures

The learner will understand the further use of marinades:

Marinades are sometimes used as cooking liquids and as basting agents.

Marinades are sometimes used as part of the cookingliquid as in Saucerbraten. The cookig liquid after further processing then may become the accompanying sauce for the food item.

BASTING refers to the moistening of a food product with stock, drippings, fat (or marinade) while cooking. Basting usually implies use of some fat agent, such as a marinade containing oil, as one of the functions of basting is to aid in lubricating the food item as it cooks, to prevent dryness.

BASTES, then, may be the same as marinades, except that they usually contain an oil product.

Bastes are usually brushed or ladled on while a food is cooking.

Vegetables as hors d'oeuvres are often prepared using some type of marinades. The marinade is usually a pickling medium and the vegetables may be marinated from a raw state or lightly blanced, depending on allowable time for marination. Light blanching shortens the required time and may aid in killing some bacteria.

Basic French dressing is a foundation product representative of the type of marinade that might be used in this type of preparation. Similarly, a cooking process termed, a la Grecque, utilizes this same type of product.

A la Grecque is usually associated with vegetable preparation as hors d'oeuvres. However, in addition to the procedures indicated above, the food product may be simmered for a short time inthe cooking liquor (oil, acid agent, water, seasonings) which then becomes the marinade.

VARIETY BREADS

The learner will be able to know the various breads and bread products serving the areas in which they will probably be employed.

The learner willbe able to prepare the following types of bread: Pumpernickel (Jewish) ... also have on hand or describe the darker "Russian" type black bread or Schwartzbrot.

- Light and dark rye bread (hard bread)
- French bread
- Italian bread
- Vienna loaf
- American rye bread, whole wheat (Pullman style)
- Bulky rolls (hard rolls)
- Onion rolls
- Bagels
- Dinner rolls (hard) e.g. French rolls
- Dinner rolls (soft) in various shapes

Also show bread or bread products with poppy seeds and sesame seeds.

SANDWICHES: General

The learner will be able to gain general background and knowledge on which future sandwich lecture-demonstrations and preparation by the learner may be based.

The learner will be able to prepare the following:

There are two main categories of sandwich: 1. Cold
2. Hot

Cold sandwiches will include: a. regular sandwiches
b. specialty sandwiches, such as regional and national-type sandwiches, and promotional or

merchandising-type sandwiches.

c. club sandwiches
d. tea and fancy sandwiches

Hot sandwiches will include:
a. regular
b. grilled sandwiches
c. broiled and baked
d. French fried and specialty
e. Entree type with gravy or sauce

The learner will be able to recognize the types of fillings.

Sandwiches fillings are of two major types:
1. "Dry"
2. "Moist"

QUIZ:

1. Why do you think that knowledge of sandwich preparation is important?
2. Name the classifications of cold sandwiches.
3. Name the classifications of hot sandwiches.
4. Give examples of each (3 and 4).
5. Name as many variety breads as you can that may be used in sandwich preparation.
6. What advantages do these breads offer?
7. How may imagination play a part in sandwich preparation and planning sandwich menus?
8. What is a quality standard?
9. Why is it important to have quality standards?
10. What is meant by quanity standard?
11. Why is it important to have standards of portion size?
12. What is one of the major qualities desired in a sandwich as stated in the information sheet?
13. What is a good rule to follow regarding length of time a sandwich may be held in a vending machine?
14. What are the two reasons for this practice?
15. What effect may dry bread have in relation to the filling and absorption?
16. What effect may too fresh bread have in relation to the filling and absorption?
17. How does refrigeration affect the staling of bread?
18. Try to explain your reasons for #17.
19. How may some staling of bread be favorable?
20. Dampness or moisture is one of the requirements for bacterial growth.

How does this relate to the placing damp towels directly on sandwiches?

SANDWICHES: Preparation and storage

Learn basic principles of sandwich preparation and storage.

The student will be able to understand the following additional factors should:

1. Quality products
2. Freshness of products
3. Moisture balance
4. Portion size (including method of preparation, cutting, etc.)
5. Eye appeal:
    a. neatness
    b. arrangement
    c. garnish
6. Work methods regarding:
    a. neatness
    b. productivity
    c. time
    d. convenience
7. Food cost

The student will be able to demonstrate the following:

1. Place a clean, damp towel or cloth on the bottom of a tray or other flat pan (such as a bake sheet).
2. Place waxed paper or other sanitary covering over the damp towel.
3. Place the sandwiches on the waxed paper, stacking them carefully, not over three or four sandwiches high.
4. Cover them carefully with waxed paper and place a clean, damp towel or cloth over the waxed paper. The sandwiches should be completely covered by the waxed paper and no part of them in contact with the towels. Remind students of previous remarks re: sanitation.
5. Refrigerate immediately until service time.

QUIZ: Sandwich Preparation and storage

1. Strict observationof proper sanitation precedures should underline all food preparation. What other factors should govern the preparation of sandwiches? Use the information sheet for reference.
2. What is meant by, pullman loaf?
3. How is pullman bread generally available on the market?
4. Name as many spreads as you can (not referring to fillings).
5. What is meant by a blended spread?
6. What is the recommendation regarding the use of melted butter for sandwiches?
7. Following the approximations in the information sheet and reference material: How much butter would be required to prepare 50 sandwiches, spreading both slices and using approximately 1 teaspoon of butter per slice?
8. If one pint of mayonnaise will spread 50 sandwiches, spreading 1 slice and using 1 teaspoon of mayonnaise, how much mayonnaise would be required for 24 sandwiches, spreading both slices?
9. How much filling should be used for a sandwich? How should this be determined?
10. What is an average portion size in ounces for cold meats and poultry?
11. What is an average portion size in ounces for cheese?
12. What is an average portion size in ounces for salad fillings?
13. What size ice cream scoop would this be?
14. Would using the correct size ice cream scoop guarantee portion control? Give your reasons.
15. How many average hamburgers to the pound?
16. How may this vary? Why? How does this relate to selling price?

17. How may several thinly slicedpieces of meat contribute to a better sandwich than a single slice of the same total weight? What reason do you think explains this?
18. How is portion control observed under this condition? (Using an undetermined number of thin slices).
19. Why is individual wrapping of sandwiches preferred over unwrapped sandwiches?
20. State the 5 basic steps suggested when storing unwrapped sandwiches.
21. Name the basic categories of tea and fancy sandwiches.
22. Make a list of filling ingredients for this type of preparation.
23. Classify them for use in two different situations: an afternoon tea, and a cocktail party?
24. What would be your reason for these classifications?
25. What kind of tea and fancy sandwiches do you think would be suitable for a children's party?

SANDWICHES: Production Methods

The student will be able to learn (for his future participation) techniques of sandwich preparation for volume or mass production.

Techniques demonstrated should show time and motion principles in general and as specifically related to food preparation.

The student will be able to complete a preparation demonstration.

Set up work area as indicated in diagram:

a. Place a service tray on the LEFT side of the work area. Cover with waxed paper. With a sharp knife, cut the bread wrapper in two between the middle slices of each loaf. Place the half-loaves, still in the wrapper, cut end DOWN on the tray.

b. Remove the wrapper from one (1) half-loaf by lifting it off, keeping the bread in a stack. Remove the heel pieces and reserve for cooks' use in dressings, meat loaves, crumbs, etc. Place in clean, covered container.

c. Place a container of creamed or softened butter, margarine, mayonnaise or other similar-use product...just beyond and to the right of the bread try.

d. Place a container with the filling to the right of the spread container. (If using lettuce or other greens, place container of clean, crisp, dry greens) next to container of filling.

e. Place a short spatula, palette knife, or butter knife in the spread container. If using a solid filler, such as meat or poultry, the filler should be pre-portioned. If using a salad filler or spread filler, place the desired size ice cream scoop or other suitable tool in the container of filler. As a guide, a #12 scoop was previously suggested for salad.

f. Place a second empty service tray in the upper right hand corner of of the bench. Cover with waxed paper.

g. Place a sharp French knife to your right in front of the tray (nearest you). You are now ready for production.

QUIZ: Sandwiches; Production Methods

1. Name as many of the various wrapping materials and methods as you can.
2. What are some of the considerations to be made in selecting the type of wrapping?
3. Why do you think that good display methods may be important?
4. Name the 8 basic principles regarding mass production and time and motion as listed in the information sheets.
5. How do you think that production may affect salaries?

SANDWICH PREPARATION: Portioning, Cutting, Arranging, Garnishing

The learner will be able to learn additional aspects of portion control; various methods of cutting, arranging, and garnishing sandwiches to produce quality and attractive, cost-controlled products.

The learner will be able to name the parts of an ice cream scoop. Numbers and approximate capacities for ice cream scoop sizes commonly used as an aid in portion control are as follows:

The number of the scoop usually appears on the blade.

Number	Approximate Measure	Approximate Weight
30	2 Tablespoons	1 to 1 1/2 ounces
24	2 3/4 Tablespoons	1 1/2 to 1 3/4 ounces
20	3 Tablespoons	1 3/4 to 2 ounces
16	4 Tablespoons	2 to 2 1/4 ounces
12	5 Tablespoons	2 1/2 to 3 ounces
10	6 Tablespoons	4 to 5 ounces

These approximations assume level measurements.

SANDWICH FILLINGS: Lecture - Demonstration

The learner will be able to gain sufficient background and knowledge in the preparation, storage, and sanitation principles related to sandwich fillings that he may participate in a follow-up food preparation class.

The learner should prepare the following filling*, emphasizing factors of sanitation.

1. Tuna fish salad
2. Chicken salad
3. Cream cheese and olive
4. Chopped ham and relish
5. Sweet filling combinations

COLD SANDWICHES

The learner will be able to learn basic principles and procedures as applied to the preparation and service of cold sandwiches.

The learner will be able to prepare the following sandwiches:

- Bacon, lettuce and tomato (toasted)
- Chicken sandwich (or turkey)
- Chicken club sandwich (toasted)
- Junior club sandwich (toasted)
- Other (untoasted club sandwiches) such as Ham Club, etc.
- Corned beef (Jewish). Also indicate that corned beef may be served hot
- Submarine sandwich

The learner will be able to cut sandwiches and arrange on plates for service.

FANCY AND TEA SANDWICHES

The learner will be able to learn by observation, various principles and methods of preparation as related to tea sandwiches and fancy sandwiches. (To aid in preparing the learner for practical application of the learned principles and methods ina forthcoming class).

The learner will be able to show interest by "dressing the window" in sandwich preparation and to show how many of the same principles may be applied to all food preparation.

The learner will learn basic principles and procedures as applied to the preparation and service of hot sandwiches.

SANDWICHES: Hot Sandwiches

The learner will demonstrate as many of the following as time permits.

Two class periods:

1. "Regular": Hamburger, hamburger variations, Western variations.
2. Grilled: Grilled Cheese, grilled meat or poultry sandwiches.
3. Broiled and baked: Cheese Dream, steak.
4. French Fried: Monte Cristo Sandwich
5. Entree type with gravy:
   Hot meat or poultry, Open Hamburg (with gravy). Show how meat product must be heated separately when using plain bread; show how meat product may be used cold by grilling the sandwich (as above) and then masking with gravy. (Meat must be sliced thin).

MONTE CRISTO SANDWICH

Recipe Example:

STANDARD RECIPE

MONTE CRISTO SANDWICH

PORTIONS: A LA CARTE SIZE CLUB SIZE:
COST

AMOUNT: 12 Sandwiches

INGREDIENTS:

12 slices ham (3/4 lb.)
12 slices Swiss Cheese (3/4 lb.)
12 slices chicken or turkey (3/4 lb.)
9 ounces butter
36 slices bread, sandwich slice #10
1 quart egg batter

PREPARATION:

1. Put 1 slice ham, then 1 slice Swiss cheese on buttered bread.
2. Top with second slice of buttered bread, place chicken or turkey and cover with third slice of buttered bread. ____________
3. Cut sandwich in thirds ________ dip in egg batter and fry in deep fat until a golden brown

Garnish with fresh fruit pieces--banana, pineapple and apple.

*If cheese melts out when frying, add small amount of sugar to egg batter--will brown quicker.

SANDWICH FILLINGS

The learner will be able to gain practical experience in the preparation of sandwich fillings and sandwich preparation with emphasis on fillings and associated application of sanitation procedures and preparation techniques.

1. Tuna fish salad
2. Chicken salad
3. Cream cheese and olive
4. Chopped ham and relish
5. Sweet filling combinations

HOT SANDWICHES: Student Preparation

The learner will be able to gain practical experience in the preparation and plating for service, of a variety of hot sandwiches as previously demonstrated by the instructor. For the student to gain practical experience in portion control.

FANCY AND TEA SANDWICHES: Student Preparation

The learner will be able to gain practical experience in the preparation of tea sandwiches and other fancy sandwiches as frequently prepared for luncheons, meeting, cocktail parties, and other functions. (Previously demonstrated by instructor).

SANDWICH PRODUCTION: Wrapping for Vending

The learner will be able to gain practical experience in production methods, sandwich wrapping and merchandising for vending, etc.

SANDWICHES: Box Lunches

The learner will prepare box lunches following the principles and procedures outlined by the instructor and as practiced by students in areas of general sandwich preparation.

NAME ____________________
Instructor ______________
Date ____________________

Print answer for questions in space provided. Circle correct answer for True-False questions.

TEST: Sandwich

Point Value

1. Name five factors that should govern preparation of sandwiches: 15
____
____
____
____
____

2. Name three hard-crust breads: ___________
____
____

3. How many ounces in an average two pound Pullman loaf?

4. The ___________ often gives the sandwich its name.

5. Name four types of tea or fancy sandwiches.

6. The establishment of a fixed quality of a product is known as a ____________________ quality.

7. Two ounces is a good average portion for meat or poultry used in a sandwich. T F 6

8. Bread may be kept fresh by placing in the refrigerator. T F 6

9. Sandwiches should be kept fresh and moist by covering directly with a damp cloth. T F 6

10. A left handed worker can work as well as a right handed worker regardless of how equipment is set up. T F 6

11. A #30 scoop may be used to provide a good single portion for any type sandwich filling. T F 6

12. The approximate measure for a number 30 scoop is 6

_______________.

13. As long as the correct numbered scoop is used, there is no danger of overportioning. T F 6

14. Sandwiches usually show good food cost but involve too much labor to be profitable. T F 6

15. The most important consideration when making a hot sandwich is that the gravy be good and hot. T F 6

DAIRY PRODUCTS: Cream, Milk, Cheese, and Non-Dairy Coffee Adjuncts

The learner will learn to gain background knowledges in the make-up and uses of dairy products with particular emphasis on varieties of cheese.

The learner will learn to become acquainted with non-dairy products frequently used in school and in in-plant feeding and in vending operations as substitutes for coffee cream. (Ice cream and associated products to be covered as a separate area).

The learn will be able to recognize the classifications of cheese. Natural cheese is further classified according to its degree of firmness, such as:
1. Hard cheese
2. Semi-hard cheese
3. Soft cheese

Examples of hard cheese are: Chedder, Swiss, Parmesan, Romano, Edam.

Examples of semi-hard cheese are: Muenster, Port du Salut, Stilton.

Examples of soft cheese are: Brie, Camembert, Limburger.

DAIRY PRODUCTS: (Con't)

Cottage cheese

Baker's or Pot cheese

Ricotta

American cheese (white and yellow)

Chedder cheese varieties (white and yellow)

Gouda

Roquefort cheese, individual portions

Camembert cheese, individual portions

Provalone (imported and domestic)

Mozzarella

Romano and Parmesan cheeses (imported)

and non-dairy coffee adjuncts as available

Name ____________________
Instructor____________________
Date____________________

Print answer for questions in space provided. Circle correct answer for True-False questions.

TEST: Dairy Products:

			Point Value
1. Homogenized milk is whole milk in which the fat has been broken down into small globulas that are evenly distributed throughout the milk.	T	F	5
2. Evaporated milk is milk from which the butterfat has been removed.	T	F	5
3. Condensed milk has over 50 percent of its original liquid content removed and has a very high sugar content.	T	F	5
4. Sour cream is a cultured product.	T	F	5
5. Pasteurization eliminated need for sanitary safeguards.	T	F	5
6. Butter sold on the general market is unsalted.	T	F	5
7. Milk is one of the most complete food items in the diet.	T	F	5
8. Cheese should be served well chilled.	T	F	5
9. Romano is a semi-soft cheese.	T	F	5
10. ____________butter has better keeping qualities than __________butter.	T	F	5
11. ____________dry milk is skim milk with water removed.	T	F	5
12. Federal regulations set a standard of not less than ___________percent butterfat content for whole milk.			5
13. Name three factors that give cheese its characteristic flavor: ____________________ ____________________ ____________________			9
14. ____________is the natural fat of milk.			5
15. ____________milk is most commonly used cheese in manufacture, although __________ milk and ___________milk are also used.			9

16. Roquefort cheese is made from ____________ milk. 5

17. Roquefort is similar to ____________cheese even though it is made from a different kind of milk. 5

18. State two other names for cheeses in the Cottage Cheese Family. 6

_______________ _______________

ICE CREAM PRODUCTS

ICE CREAM DESSERTS AND DISPENSING

The learner will understand some of the aspects of quality standards in ice cream products and to know some of the mechanics and procedures of storage and handling.

The learner will become familiar with many of the ice cream desserts normally associated with restaurant operations and to learn the rudiments of dispensing ice cream and ice cream products.

The learner will understand aspects of yield and cost as directly associated with proper dispensing procedures.

PUDDINGS AND GELATIN DESSERTS

The learner will gain basic knowledge of custards, cornstarch puddings tapioca and other puddings and gelatin desserts. (To serve as base for student preparation of these items).

HOW TO CUT AND SERVE PIES AND CAKES

The learner will know how to cut pies and cakes neatly and accurately in a manner that will yield the required number of portions of equal size.

The learner will be able to recognize the importance of uniform portions and the relation to cost control, production control, and customer satisfaction.

SECTION 111 - BREAKFAST COOKERY

CEREAL COOKERY:

The learner will gain general background knowledge.

The learner will be able to learn the basic procedures in the preparation and serving at cooked cereals.

The learner willbe able to relate principles of starch cookery to the preparation of cooked breakfast cereals.

CEREALS AND CEREAL COOKERY:

The learner will be able to gain background knowledge regarding cereals. For the student to learn basic procedures in the preparation and serving of cooked cereals.

BREAKFAST COOKERY

DEMONSTRATION: Preparation of Eggs: "Boiled" (simmered); Poached; Scrambled.

The learner will be able to learn through demonstration, the techniques of breakfast cookery that he will employ in future classes.

BREAKFAST COOKERY: DEMONSTRATION

PREPARATION OF EGGS: FRIED, OMELETTES, SHIRRED

The learner will be able to learn through demonstration, the techniques of breakfast cookery that he will employ in future classes.

BREAKFAST COOKERY: DEMONSTRATION

BREAKFAST MEAT COOKERY: SAUSAGE, BACON, HAM

The learner will be able to learn through demonstration, the techniques of breakfast cookery and handling procedures of specific meat products that he will be working with in future classes.

BREAKFAST COOKERY: DEMONSTRATION

WAFFLES, GRIDDLE CAKES, FRENCH TOAST, CINNAMON TOAST

The learner will be able to learn fundamentals and principles of preparing breakfast batters.

The learner will be able to learn methods of care and handling of batters, preparation and maintenance of equipment, and temperature controls necessary to produce desired results.

The learner will be able to prepare breakfast menus and to round out general knowledge regarding breakfast cookery.

Name ______________________
Instructor__________________
Date_______________________

Print answer for questions in space provided. Cirlce correct answer for True-False questions. 5 points for each answer.

TEST: BREAKFAST COOKERY

1. Breakfast is important nutritionally because it is frequently the first food eaten for a period of nearly twelve hours. T F

2. Brown shell eggs are supeior to white shell eggs. T F

3. Acid toughens albumen (in egg white) T F

4. Grade C eggs recommended for table use. T F

5. Soft cooked eggs should be boiled for five minutes. T F

6. Cooking at high temperatures and improperly cooling may cause discoloration in hard cooked eggs. T F

7. Fine grain cereals should be combined with hot water, stirring occasionally. T F

8. Whole grain cereals should be stirred constantly to prevent sticking. T F

9. Waffle batter usually ocntains more eggs than griddle cake batter. T F

10. Waffle irons should be heavily greased to prevent sticking of product. T F

11. Low temperatures are preferred for most egg cookery. T F

12. Egg yolks are high in fat and ____________.

13. Name two common falts in the cooking of fried eggs.

____
____

14. When eggs in fried on top of a meat item, they are referred to as style.

15. Bacon is often partly cooked before service by separating the slices and baking in a low temperature oven. This process is called ____________. This process may also be accomplished using other techniques.

16. Hotel pack bacon is packed approximately _______________slices to the pound.

17. Avery light breakfast, often consisting of fruit juice, coffee and toast or light pastry is called a ________________breakfast.

18. The desired approximate temperature of a griddle for producing griddle cakes is ____________________.

19. The most popular breakfast potatoes are usually prepared by what cooking method __________________.

20. Large eggs weigh approximately ________________ ounces per dozen.

BAKING: LECTURE: GENERAL BACKGROUND AND INFORMATION: ORIENTATION

The learner will be able to gain general background knowledge of products used in baking and how the characteristics of certain products lend to their use in baking. (To serve as a springboard for baking lecture demonstrations and production of baked goods by students).

BAKING: LECTURE-DEMONSTRATION: MUFFINS AND BISCUITS (Quick Breads)

The learner will be able to gain sufficient knowledge regarding muffin and biscuit production that through demonstration he may achieve readiness to prepare items for menus in the course of instruction.

BAKING: DEMONSTRATION: Rolls

The learner will be able to gain sufficient background information regarding bread and roll production that through observation (demonstration) he may achieve readiness to prepare items for menus in the course of instruction.

BAKING: PIE CRUST AND PIES

The learner will be able to gain sufficient knowledge regarding the production of pie crust, that through demonstration he may achieve readiness to prepare pie crust (under supervision) for dessert and main course items in the course of instruction.

The learner will be able to gain sufficient backgroundd information to ready him for pie production and associated dessert item.

1. Pie Crust
2. Ingredients for Pie Crust
3. Pie Trimmings and Pie Washes
4. Thickening Agents
5. Pie Fillings
6. Fruit Pie Fillings
7. Cooked Fruit and Juice Method
8. Home Made Method
9. Cream Pie Method
10. Chiffon Pie Method
11. Soft Pie Filling
12. Specialty Pies

BAKING: Cookies

The learner will be able to gain sufficient knowledge regarding the production of cookies, that through demonstration he may achieve readiness to prepare cookies for menus during the course of instruction. To create an awareness that wholesome left-over baked goods of other types may be converted to cookies (and other products), thereby providing on outlet for goods that might otherwise represent loss.

The learner will be able to demonstrate the two mixing methods:

1. Creaming method
2. One-stage method

The learner will be able to explain the three principal methods of mixing:

1. Creaming method
2. Two-stage method
3. Sponge or foam method

The learner will be able to explain the types of cookies.

1. Rolled method
2. Ice Box method
3. Spritz or bagged method
4. Bar method
5. Sheet method
6. Drop method

BAKING: Cakes and Icings

The learner will gain basic knowledge regarding the ingredients in preparing cakes and the principal ways in which cake batters are mixed. For student to gain some background information regarding icings and the three main functions of icings.

The learner will be readied, through demonstration, for the production of these items.

SECTION V - STOCKS

The learner will be able to gain basic knowledge of stocks; their purpose; how they may be derived; how they may be used; and how other prepared products may be used as substitutes or to implement flavor of stocks.

The learner will be able to gain knowledge of care and handling of stocks.

The learner will be able to demonstrate the foundation for preparation of soups and sauces.

STOCKS:

The learner will be able to gain basic knowledge of stocks; their purpose; how they may be derived; how they may be used; and how other prepared products may be used as substitutes or to implement flavor stocks.

The learner will be able to gain knowledge of care and handling of stocks.

QUIZ: Stocks

1. What is stock?
2. What are some of the economic factors that may influence our selection of source of stock? e.g. use of bases; making our own, etc.
3. What is an average recommended time for desired extraction in the preparation of stock?
4. What may occur due to excessive cooking?
5. How may length of cooking time affect gelatin content of stock?
6. Is gelatin content always an indication of quality?
7. How may left-over food products be utilized in the preparation of stocks?
8. What is our prime concern regarding sanitation in the use of left-overs?
9. Why is it recommended that stocks should not be salted in preparation?
10. How should meat bones be cut for stock preparation?
11. How does surfacr area of the bones affect stock preparation?
12. What danger may be presented if bones are chopped with a cleaver?
13. Name the four major stocks.
14. State the products from which they are derived?
15. Why is it recommended that stocks barely simmer, rather than boil?
16. What other effects may boiling cause?
17. What are the most favorable growth temperatures for many bacteria?
18. How does this affect the handling of stocks?
19. What is the "golden rule" for cooking and heating?
20. State the recommended procedure for cooking stock in a water bath? Be specific.
21. Why is a water bath more desirable than leaving the stock on a bench to cool?

22. How is an overflow pipe used?

23. What may occur if the water level in a sink rises considerably higher than the liquid in the pot?

24. Why is it recommended that the pot be placed on bricks or blocks?

25. What relation does this have to "venting"?

26. Draw a diagram relating to your recommended procedure for cooking stock.

27. Why is it sometimes recommended that the fat not be removed unless the product is to be used immediately?

28. What considerations should be made regarding the placing of hot or warm foods in a walk-in refrigerator?

29. If it is necessary to cool stocks at room temperature (not in a water bath) what sanitation precautions should be taken?

30. Why should care be exercised not to block the fan or blower in a walk-in refrigerator?

SOUPS: General Information

The learner will be able to know the different types of soups, their preparation, care and handling; and their relationship to the menu.

The learner will be able to relate and utilize knowledge of stocks gained previously.

SOUPS:

The learner will be able to know the different types of soups, their preparation, care and handling; and their relationship to the menu.

The learner will be able to utilize basic knowledge learned regarding stocks in the preparation of soups.

QUIZ SOUPS:

1. Define the term, soup.
2. Are there exceptions to this definition? Explain.
3. Name the three classifications of soup as indicated in The Professional Chef.
4. Give examples in each classification.
5. What is a consomme?
6. What is the difference between bouillon and consomme?
7. How are the names of creamed soups derived?
8. From what source are chowders generally derived?
9. What are some of the possible exceptions?
10. What are bisques?
11. From what source are they generally derived?
12. Name as many nationality soups as you can and identify the country with which they are associated.
13. How many different soups appear on the menus of The Professional Chef?
14. Classify them as to the source from which they are derived.
15. What part do you think soups may play nutritionally?
16. How should hot soups be served?
17. How should cold soups be served?
18. What is clarification as related to soup cookery?
19. What three major ingredients are required in the clarification process? Explain.
20. State the procedure for preparing consomme.
21. What is meant by a raft?
22. What effect may vigorous boiling have on a stock?
23. What effect may vigorous boiling have on a consomme?

24. What is an approximate length of cooking time required for clarification?

25. What is double consomme?

26. In preparing consomme, is a stock pot with a spigot necessary, or primarily convenient?

27. What difficulties may occur if improper methods are used to drain consomme?

28. How can these difficulties be overcome?

29. What would probably happen if you poured boiling stock directly into your egg white mixture?

30. How would this affect clarification?

31. Name as many soups as you can that contain paste products.

32. Name as many soups as you can that contain legumes.

33. Name as many soup garnishes as you can.

34. What are profiterolles? How are they prepared and used for soups?

35. What are croutons? How may they be varied?

SAUCES

The learner will be able to gain sufficient general background regarding sauces that he may know terminology and be able to recognize and identify the basic sauces by sight; to serve as a basis for the demonstration of thickening agents; the two subjects combined, sauces and thickening agents, to enable student to start preparation of basic sauces as they appear on the menu.

SAUCES:

The learner will be able to gain a sufficient general background regarding sauces that he may know terminology and be able to recognize the basic sauces.

The learner will be able to know and understand the principles of sauce cookery and their importance.

The learner will be able to build a foundation upon which the student may base initial preparation of sauces; and to encourage further study and skill training.

QUIZ: Sauces

1. Define the term, "sauce" as indicated in The Professional Chef and in the information material.
2. Sauces may enhance the flavor and appearance of the food with which they are associated. What else may they contribute?
3. Excluding Hollandaise, what are the mother sauces? State by name.
4. What is meant by the term, "small" sauces?
5. What is another term for Espagnole?
6. From what stock is it derived?
7. What was the original derivation of Bechamel?
8. How is it commonly considered now?
9. What relationship should a sauce have to the food with which it is associated?
10. How do we properly differentiate white sauce from cream sauce?
11. What ingredients may be in the foundation tomato sauce?
12. What is the principal veloute in extensive usage today?
13. What other types of veloute are there?
14. From what sources are they derived?
15. What is Hollandaise sauce?
16. What are some of the sauces that are prepared in the same manner?
17. Why is "high degree" of heat a problem in preparing Hollandaise?
18. What sanitation precautions must be taken in handling and holding Hollandaise sauce?
19. Why is stainless steel cookware recommended for the preparation of Hollandaise sauce?
20. Can you think of any type of cookware more suitable? If so, state

your reasons.

21. What is glace de Viande?

22. How is it prepared?

23. What is its use?

24. State the basic precedure in its use.

25. What is demi-glaze?

26. What is its use?

27. State the procedure for using a liaison.

28. What precautions must you take? Why?

29. What are bread sauces?

30. From what do they derive their menu names?

31. With what products are cold butters usually associated?

32. With what products are warm butters usually associated?

33. Name several cold butters.

34. Name several warm butters.

35. How may cold butters be prepared? State the entire procedure.

SECTION IV - THICKENING AGENTS

STARCHES AND STARCH COOKERY:

The learner will be able to gain background knowledge of starches, their characteristics and usuage; for student to understand their importance and relationship to other forms of cooking; and for the learner to know generally and specifically their various uses in all forms of cooking.

STARCHES AND STARCH COOKERY: Basic Knowledge

The learner will be able to gain background knowledge of starches, their characteristics and usuage; for learner to understand their importance and relationship to other forms of cooking; and for the learner to know generally and specifically their various uses inall forms of cooking.

The learner will be able to recognize the different types of starches have different characteristics in relation to:

1. thickening power
2. stability
3. clarity
4. sheen

The learner will be able to demonstrate:

1. the kind of starch
2. the ratio of starch to liquid
3. the temperature to which the starch is heated
4. the time and temperature of standing after heating
5. the presence of acid in the mixture
6. the proportion of sugar in the mixture
7. the amount of dextrinization taking place in the starch

THICKENING AGENTS:

The learner will be able to know various thickening agents and their various uses.

The learner will be able to gain sufficient background in the preparation of thickening agents that he will be able to duplicate them under the supervision of the instructor.

The learner will be able to understand the food theory presented that will aid in readying him for actual food preparation.

QUIZ: Thickening Agents

ROUX:

1. What is the primary function of a thickening agent?

2. What is an important secondary function?

3. Most thickening agents are _______________ products.

4. The properties of various starches give them different characteristics in relation to:

   1. _____________ 2. _____________ 3. _____________ 4. _______________

5. What is the most commonly used starch in the preparation of roux?

6. Name of the additional starch and starch-type products.

7. What is roux?

8. What are the average ratios in the preparation of a roux, using bread flour?

9. Why will they vary?

10. Why is roux in greater general use than other thickening agents?

11. Name the two main types of roux.

12. What the they used for specifically?

13. It has been stated that roux should be cooked prior to introduction in a liquid. Why?

14. How may roux be cooked?

15. Why is browning or "toasting" of flour sometimes recommended in the preparation of brown roux?

16. Why is the flour ratio to fat or oil, greater in the preparation of brown roux than light roux?

17. If you prepared light roux and then cooked it for an additional period, would this affect its thickening power? State your reason.

18. What fats or oils are recommended for GENERAL use in the preparation

of roux?

19. What type of fat should be used in the preparation of roux for roast pork gravy? Why?

20. Can roux be prepared and stored for future use? What precautions do you think you should take?

QUIZ: THICKENING AGENTS

ADDITIONAL THICKENING AGENTS:

1. With what type of sauce is cornstarch commonly used as a thickening agent?
2. What is one of the characteristics of cornstarch that makes it suitable for this use?
3. What is meant by translucency?
4. Which usually occurs first, when using cornstarch, translucency or full thickening?
5. What is the recommended procedure after thickening has occured? Why?
6. Which product has the greatest stability and heat resistance?

   a) cornstarch b) bread flour c) cake flour
7. What is beurre manié?
8. What is its primary use?
9. What precautions must be taken to prevent separation or breaking?
10. What is a liaison?
11. What is the recommended procedure for its use?
12. What precautions must be taken to prevent curdling?
13. What is curdling?
14. What is arrowroot?
15. How is it commonly used?
16. How may a student keep abreast of changes and developments in our industry?
17. What is a pre-cooked starch?
18. How may it be used?
19. What advantages do you think that this offers?
20. What relationship do thickening agents have to starch cookery?

VEGETABLE COOKERY: Potatoes (Breakfast) Demonstration

OBJECTIVE: The learner will be able to learn fundamental procedures for preparing potatoes for all meals but specifically those pototes categorized as "breakfast" potatoes in readiness for learner preparation of breakfast menus and to follow.

The learner willable to list potatoes and be able to define the garnishing ingredients and methods of preparation.

VEGETABLE COOKERY: Fresh, Frozen, Canned

OBJECTIVE: The learner will be able to gain a knowledge of the characteristics and qualities of vegetables in their common market forms; the principles and methods of pre-paration, cooking, and handling; and to recognize and understand the factors involved in their selection for use.

RICE AND FARINACEOUS PRODUCTS:

OBJECTIVE: The learner will be able to demonstrate principles of cooking rice, paste products, and other farinaceous products and to understand the valuable additions to the menu afforded by these items; and how they may be used as potato-vegetable substitutes, extender items, dressings and suffings, and in desserts.

VEGETABLE COOKERY: SUBSTITUTES: Rice Products

OBJECTIVE: The learner will be able to recognize the principles of cooking rice products and to be able to recognize and identify various products in cooked and uncooked form; to understand the valuable additions to the menu afforded by these items as potato and/or vegetable substitutes, extender items, dressings and stuffings, and in desserts.

VEGETABLE AND POTATO SUBSTITUTE: Pastas

OBJECTIVE: The learner will be able to list principles of cooking paste products and to be able to recognize and identify a number of different paste products.

The learner will be able to understand the valuable additions to the menu afforded by these products; how they may be used as potato or vegetable substitutes and as extender items.

VEGETABLE COOKERY: Legumes

OBJECTIVE: The student will be able to demonstrate the methods of prepararation, and handling of legumes; and to understand the principles and procedures related to their cooking and use.

KITCHEN PRACTICE: Application of Theory: Thickening Agents:

The learner will be able to apply practically the theory that he has learned from reading and demonstration. This practice also bears out the learned theory.

PREPARATION OF ROUX:

The learner will know how to prepare roux; to know how to process flour for brown roux; to recognize the differences between light roux and brown roux, visually and by odor.

The learner will be able to know and understand the differences in procedure in the preparation of roux.

VEGETABLE COOKERY: Yellow and White Vegetables

OBJECTIVE: The learner will be able to learn methods of pre-paration and preparation of yellow and white vegetables in various purchased forms, with particular emphasis on procedures to be followed with fresh vegetables, although other forms will also be discussed.

The learner will be able to relate previous information regarding nutrition to correct cookery methods to aid maximum nutritional value.

SECTION VII - VEGETABLE COOKERY

VEGETABLE PREPARATION AND COOKERY:

The learner will be able to know and appreciate the values of proper vegetable cookery.

The learner will be able to learn methods of pre-paration and preparation of frozen, fresh, and canned vegetables with particular emphasis on "The Laws of Proper Vegetable Cookery".

The learner will be able to relate knowledge of nutrition to correct cooking methods to provide products of highest quality standards and maximum nutritive retention.

VEGETABLE COOKERY: Green Vegetables and Green Leaf Vegetables

The learner will be able to learn principles and methods of pre-preparation and preparation of green vegetables and green leaf vegetables.

The learner will know care and handling methods and to understand principles of color retention as related to maintaining maximum nutritive value; for learner to know procedures and methods of cooking and holding green vegetables for service.

QUIZ: VEGETABLE COOKERY

1. What procedure should be followed prior to cooking fresh vegetables?
2. What is the pre-cooking precedure called?
3. How should leaf vegetables be processed before cooking? State the procedure.
4. Why should the greens be removed from the water, rather than the water drained from the greens?
5. Excessive peeling of vegetables has an economic aspect. What other factors should be considered regarding the peeling and preparation of vegetables?
6. How do the rules that apply to the preparation and cooking of fresh vegetables compare with the rules for frozen vegetables preparation and cleaning?
7. Which usually require the least cooking time, frozen or fresh vegetables? Why?
8. Frozen vegetables should not be refrozen after thawing. Why?
9. At what recommended temperature range should some frozen vegetables be thawed before cooking?
10. What are some of the frozen vegetables that should be thawed before cooking? Why?

B.

1. Why should most of the other kinds of frozen vegetables be cooked from their frozen state?
2. At what stage of doneness are canned vegetables available on the market?
3. How much further cooking is necessary?

4. What is the recommended procedure for processing and canned vegetables available on the market?

5. What is the most attractive, appetizing color that green vegetables for service?

6. What is responsible for this color?

7. How do acids affect the color?

8. How do alkalies affect the color?

9. What may result from the use of baking soda?

10. Why is one of the first rules: Cook in as small an amount of water as short a time as possible.

QUIZ: VEGETABLE COOKERY (Cont'd)

C.

1. Should green vegetables generally be cooked covered or uncovered? Why? Is it possible to cook them covered for a brief period of time and have favorable results?
2. What is the basic rule for cooking most vegetables?
3. What benefit does this have?
4. What effect do acids have on red vegetables?
5. Why is it suggested that red vegetables be cooked covered?
6. Are there any exceptions? What are they? Why?
7. Are yellow vegetables subject to much color change in cooking? Explain.
8. If any classification of vegetables is overcooked what will be the probable result?
9. What happens to the white color of vegetables if overcooked?
10. Why is it recommended that most strong juice vegetables be cooked in generous amounts of water?

D.

1. Are there any exceptions to No. 10 above? Explain.
2. Is cooking in generous amounts of water consistent with best nutritional procedures?
3. State the three major changes that occur in the cooking of most vegetables.
4. What is a vegetable plate?
5. What is a good average number of vegetables suggested for a vegetable plate?
6. Name as many green vegetables as you can.
7. Name as many yellow vegetables as you can.

8. Name as many white vegetables as you can.

9. How does the method of cutting affect cooking time?

10. How may the method of cutting affect nutritional value? Why? Always?

QUIZ: VEGETABLE COOKERY (Con'd.)

E.

1. Why is uniformity of cutting important?
2. If frozen vegetables must be cooked and held for service at a later time , what is the recommended procedure?
3. Why is considerable knowledge of vegetable cookery needed to produce quality, interesting, vegetable plates?
4. What rules do you think are valuable for planning vegetable plates?
5. What vegetable "substitutes" are sometimes included in vegetable plates?
6. When acids are used to retain the red color in some vegetables, when should the acid be added? Why?
7. Name as many of the "Do's" of Proper Vegetable Cookery that you can.
8. Name as many of the "Don'ts" of Proper Vegetable Cookery that you can.
9. What is pressure cooking?
10. Give as many general directions as you can for the use of pressure cookers.

F.

1. How does steam-jacket cooking differ from steam cooking?
2. State the preparation for cooking for fresh:
    a. string beans
    b. beets
    c. broccoli
    d. cauliflower
    e. corn on the cob
    f. kale or other leaf vegetable
    g. winter squash
    h. summer squash
    i. turnip
3. Name as many vegetables as you can that are suitable for boiling.
4. Name as many vegetables as you can that are suitable for baking.

5. Name as many vegetables as you can that are suitable for braising.
6. Name as many vegetables as you can that are suitable for frying and sauteeing.
7. Do they require processing first? What is your reason?
8. What is an important safety rule in pressure cooking?
9. Does this have any relation to cooking in any moist medium in terms of safety? Why?
10. To what degree of doneness do you think that vegetables should be cooked

NAME ______________________
INSTRUCTOR ________________
DATE ______________________

Print answer for questions in space provided. Circle correct answer for True-False questions.

TEST: Vegetable Cookery

Point Value

1. Baking soda should be used when cooking green vegetables so that they will hold their color.

2. All frozen vegetables should be cooked without thawing.

3. Acids help to intensify the color of red vegetables.

4. The cover or hatch of a pressure cooker may be removed at any time as they are all equipped with safety devices.

5. If previously frozen vegetables have thawed and are not going to be used, they should be refrozen as soon as possible.

6. Canned vegetables are fully cooked and require only reheating.

7. Generally, green vegetables should be cooked covered to retain acid content.

8. The natural color of green vegetables is the most appetizing color they can have.

9. Yellow vegetables are not subject to too much color change unless overcooked.

10. All cut or peeled vegetables should be refrigerated and protected as exposure to air causes discoloring and/or deterioration.

11. Spoilage in canned vegetable may often be detected by swelling or distortion of the cans.

12. The rule is: cook vegetables in as _______ water as possible, as _________ as possible.

13. Acid products should be added at the _______ of cooking time.

14. Proper cooking methods aid in preserving ___________ value.

15. Name the three major changes that occur in vegetables as they cook:
a) _______________ b) _______________ c) _______________

16. _______________ cooking green vegetables may cause discoloration and loss of nutritive value.

17. Walk-in refrigerator temperatures should generally be from ______________ to ______________ F.

18. The ___________ are the family of pod bearing vegetables, such as peas and beans.

STUDY GUIDE: RICE AND FARINANCEOUS PRODUCTS:

1. Name some of the different types of rice.
2. What is brown rice?
3. What is converted rice?
4. What kind of flavor does brown rice have?
5. What do you think contributes to this flavor?
6. What are the two principles methods of preparing rice?
7. Describe them as fully as you can.
8. What is meant by the them, "farinanceous"?
9. By what other names is wild rice known?
10. State general preparation directions for wild rice.
11. With what products is it commonly associated?
12. What are pastas?
13. What are the principal ingredients of quality paste products?
14. What is the name of the flour from which semolina is derived?
15. How does this product aid in maintaining the shape, form, and texture of past products?
16. What are middlings?
17. What is meant by the term, "al dente"?
18. State general directions for the cooking of past products.
19. What is the rule of thumb regarding the ratio of water to pasta in the cooking of macaroni products?

QUIZ:

1. What are legumes?
2. What is their nutritional significance?
3. What parts of this vegetable are used for human food?
4. What are dried legumes?
5. What is their principal use?
6. How else may they be used?
7. What are some of the reasons for their original widespread use?
8. In what forms are they available for institutional and consumer use?
9. The cooking of beans and all leguminous vegetables should ____________ the ____________ and break up the compact grains of ____________________.
10. How is this accomplished?
11. How much water will dry legumes absorb?
12. What is the effect of acid products on the legumes?
13. How may vigorous boiling affect legumes?
14. How may cooking time be shortened?
15. How may baking soda affect cooking of legumes?
16. What effect may soda have if used in the soaking water?
17. State the recommended procedure for cooking legumes.
18. Should the soaking water be discarded? State reasons.
19. How may the degree of doneness be determined?
20. How does the intended usage of the product affect cooking time, etc.?
21. What is the recommended procedure for adding acid products used in preparation of legumes?
22. What is the reason that split peas do not require soaking?
23. State additional uses (other than soup) for the cooked, canned product.

24. What factors may contribute to further popularity of legumes in all forms?

25. Why should food service personnel have a good background in the preparation and use of legumes?

SECTION VIII

PRINCIPLES OF COOKERY

BROILING AND GRILLING: Demonstration

OBJECTIVE: The learner will be able to demonstrate the fundamental knowledge of broiling and grilling and the differences and similarities between and two.

The learner will be able to list the equipment and tools used in these methods of cooking and how to clean and maintain them.

PRINCIPLES OF COOKERY: Saute and Panfry

OBJECTIVE: The learner will be able to gain fundamental knowledge sauteing and panfrying and to recognize the differences and similarites between and two.

The learner will be able to become familiar with the tools and equipment used in these cooking methods. The learner will be able to the kinds of products associated with these methods of cooking.

PRINCIPLES OF COOKERY: Steaming, Boiling, Poaching:

OBJECTIVES: The learner will be able to learn the fundametals of these three mediums and to understand the differences relative to: temperature time, moisture.

The learner will be able to gain knowledge of the various products associated with these three mediums and to understand their effect on the products and why one medium would be favored over another, depending on the food product being used. The learner will be familiar with the associated tools and equipment used in these methods of cooking.

PRINCIPLES OF COOKERY: Braising and Stewing

OBJECTIVE: The learner will be able to gain fundamental knowledge of the processes of braising and stewing and to recognize the difference and similarities between the two.

The learner will be able to list the equipment and tools used in these cooking methods.

The learner will be able to know what kinds of products these methods are usually associated.

PRINCIPLES OF COOKERY: Deep Fry

OBJECTIVE: The learner will be able to learn fundamentals of deep fat frying and the care and maintenance of equipment and the frying medium.

The learner will be able to learn principles of breading and to gain knowledge of products often associated with deep fat frying.

PRINCIPLES OF COOKERY: Roast and Bake

OBJECTIVE: The learner will be able to gain fundamental knowledge of the processes of roasting and baking and to recognize the differences and similarities between the two.

The learner will be able to become familiar with the equipment and tools used these cooking processes and to know what kinds of products are associated with these methods, particularly roasting as applied to meats.

The learner will be able to gain knowledge of temperatures, both external and internal, regarding degree ofdoneness of product, minimum shrinkage, quality product, etc.

PRINCIPLES OF COOKERY: Review

OBJECTIVE: The learner will be able to review previous lecture-domenstrations and discussions covering principles of cookery in preparation for testing to follow and for full menu preparation in the coming week.

The learner will be able to have the opportunity to ask additional questions and clarify any previous points that might be unsettled or unclear.

The learner will be able to determine what he does know and what points require further study before testing.

BREAKDOWN OF POULTRY AND RELATED INFORMATION

OBJECTIVE: The learner will be able to learn steps in breakdown of poultry in terms of standard procedures, ease of handling, greatest yield, and convenience in use.

The learner will be able to know related information about turkey products, the form in which they may be purchased and their use.

SECTION IX - MEATS

MEATS: GENERAL AND POULTRY

OBJECTIVE: The learner will be able to be aware of and appreciate the federal program of inspection for meats and poultry for wholesomeness. The learner will be able to know the different classifications of poultry, the variations in each classification, and the general methods of preparation associated with poultry products; To add to the learner's background and to provide infomration that will be helpful as he approaches practical application of theory.

MEATS: Beef

OBJECTIVE: The learner will be able to gain knowledge of beef and beef cuts and to gain some experience in identification of the various cuts, their uses and from where they are derived. The learner will be able to recognize the federal grades and appreciate the role of federal inspection in meat grading.

MEATS: Lamb

OBJECTIVE: The learner will be able to gain knowledge of lamb and lamb cuats and to gain some experience in identification of the various cuts, their uses, and from where they are derived.
The learner will be able to list federal grades and to know the characteristics of quality lamb.

MEATS: Veal

OBJECTIVE: The learner will be able to gain background knowledge of veal and veal cuts and to gain some experience in identification of the various cuts, their uses and from where they are derived.
The learner will be able to list the federal grades and to know the

characteristics of quality veal.

PORK AND PORK PRODUCTS: Lecture

OBJECTIVE: The learner will be able to gain background knowledge of pork and pork products and be able to recognize and explain various pork products, how they may be used, and from what cuts they are derived.

MEATS: Variety Meats

OBJECTIVE: The learner will be able to gain knowledge of variety meats and be able to identify products and the source from which they derive.

The learner will be able to demonstrate methods of storage, pre-prepartion and preparation, and the variety of dishes that may be prepared from these specialty items.

MEATS: Review

OBJECTIVE: The learner will be able to review previous lecture-demonstrations and discussions covering meats in preparation for testing and practical application through menu preparation.

The learner will be able to have the opportunity to ask additional questions and clarify areas of which he is unsure and to understand points that might previously have been unclear. For the learner will be able to determine what he does know and what points require further study before testing.

SECTION X - SEAFOOD: Fish and Shellfish

OBJECTIVE: The learner will be able to gain background information regarding fin fish and shellfish; to be able to recognize and identify commonly used fish and shellfish; to learn fundamentals of storage and handling; to learn characteristics for determining freshness; and to know general cooking methods associated with fish and seafood products.

VEGETABLE COOKERY: Red Vegetables and Vegetable Plates

OBJECTIVE: The learner will be able to learn methods of pre-preparation and preparation of fresh, red vegetables; care and handling of cooked vegetables, fresh and canned, prior to service; and for learner to relate previous information regarding nutrition to correct cookery methods to aid maximum nutritive value.

The learner to understand and appreciate the role of vegetables and vegetables plates on the menu.

NAME THE TOOL AND ITS USE

Name: Butcher Knife	Use: Used to cut meat
bizhi': Beesh bee na'a'ahi	Choo i gih: Atsi bee nehelgeesh
Name: French Knife	Use: For slicing, chopping, mincing and dicing
Bizhi':	Choo'i gih:
Name: Boning Knife	Use: Remove bone from meat
Bizhi': ats' in bibeezh	Choo i gih: Atsin Atsi' baa bihilgeesh
Name: Ham Slicer	Use: Slice ham
Bizhi': bisoodih bitsi' bee nehelgeeshi	Choo i gih: bisoodin bitsi' (HAM) bee nelgeesh
Name: Cleaver	Use: Chop bones
Bizhi': Atsin bee nahalne'	Choo i gih: Atsin bee nahalne'
Name: Clam Knife	Use: Use to open clams
Bizhi': Beesh clam bee	Choo i gih: clam bee Q'adalne'
Name: Butcher's Steel	Use: To maintain an edge
Bizhi': beesh bee ahahak' ashii	Choo i gih: beesh bee aha' ha' k'ash
Name: Pie or cake knife	Use: Cut and serve
Bizhi': ba'ah tikani be hahakahi	Choo i gih: ba'ah tikani bee nehelgeesh doo bee hahakah
Name: Paring knife	Use: Use for vegetable or fruit
Bizhi': beesh be elgeshii	Choo i gih: nimasi dah bilaasanaa
Name: Roast Beef Slicer	Use: Slice roast

Bizhi': atsi'bee nehekehii	**Choo i gih: atsi bee nehe k'eh**
Name: Hand Meat Saw	**Use: Saw bones**
Bizhi': ats' in bee naach'ishii	**Choo i gih: ats' in bee naa ch'ish**
NAME: Bake Pan	**Use: Meat, apples**
Bizhi':	**Choo i gih:**
NAME: Roasting Pan	**USE: Roast beef, pork veal**
Bizhi':	**Choo i gih:**
NAME: Steel Skillet	**USE: Eggs and potatoes skillets**
Bizhi': tse'i	**Choo i gih:**
NAME: Bainmaines	**USE: Storage hot and cold water**
Bizhi': teetsaa' at'aa adanittsoogi	**Choo i gih:**
NAME: Sauce Pan	**USE: Cook on range top**
Bizhi': bee abezhii	**Choo i gih:**
NAME: Sheet Pan	**USE: Bake cookies**
Bizhi': be ana'aka'hi tahii	**Choo i gih:**
NAME: Hot Skillet	**USE: Pan broil, Fry**
bizhi': tsee'i ditaanigi	**Choo i gih:**
NAME: Frying or Saute pan	**USE: Saute Veg.**
Bizhi': tsee'i	**Choo i gih:**
NAME: Deep Fat Fryer	**USE: Fry**
Bizhi:	**Choo i gih:**
NAME: Mixing Machine	**USE: Whip, slice, chop, grind**
Bizhi': Bee ta'oonihii	**Choo i gih: bee ta'oonih**
NAME: Power Dicer Attachment for mixer of food cutter	**USE: Chop, grind, slice, dice shred**
Bizhi': atsi'doo chil ataa ateego	**Choo i gih: atsi'doo chil ataa**

niyil geshii	attego niyit geesh
NAME: Braiser	**USE:** Braise, stew
Bizhi': bee abezhii	Choo i gih: bee da' abeezh
NAME: Double Broiler	**USE:** Items that scorel pudding
Bizhi': atkihodi'nilgo bee abezh'igi	Choo i gih: bee da'abeezh
NAME: Flat Spatula	**USE:** Spread icing, mix, spread scrape
Bizhi': bee adleeshi	Choo i gih: bee adlesh
NAME: Colander	**USE:** Rinse first and drain pasta
Bizhi': teets'aa' be ha'al'ee	Choo i gih: bee ha'aleet
NAME: Hand Meat Tenderizer	**USE:**
Bizhi': atsi' bee tsidi	Choo i gih: Atsi'bee yiitsid
NAME: Slotled	**USE:** No liquid
Bizhi': beeshadee' binikah dahasdzaanigi	Choo i gih:
NAME: Strainer	**USE:** Drain Foods
Bizhi': bitse'deez'a'hi'bee ha'al'eetii	Choo i gih: bee ha' al' eel
NAME: Veg. Peeler	**USE:** Peeling
Bizhi': nimasii bee bilgeshii	Choo i gih: nimasii bee bilgeesh
NAME: Solid Kitchen Spoon	**USE:** Fold, stir, serve
Bizhi': beeshadee'bee ha'iikahi	Choo i gih: bee ha'ii kah
NAME:	**USE:** Light whipping egg white cream
Bizhi': bee taa'a'nitii	Choo i gih: bee taa'a nil
NAME: Pastry Wheel	**USE:** Cut pastry
Bizhi': Bee na'iil geshii	Choo i gih: bee na'iil geesh
NAME: Melon Baller	**USE:**

Bizhi': bee taa a'nitii att sii sig	**Choo i gih**: bee taa a' nil
NAME: For Wire Whip	**USE**: Creamy whipped sauces and gravies
Bizhi':	**Choo i gih**:
NAME: Skimmer	**USE**: To skim grease or food part particles from soups
Bizhi': bee sh'a dee' Chil bee baa nal'eetii	**Choo i gih**: Chil bee baa nal eetii
NAME: Kitchen Scaper	**USE**: Used to serve veg. etc. without liquid
Bizhi': Beesh'adee'binikah dahasdzaanigi	**Choo i gih**:
NAME: Offset spent ula	**USE**: Mix, spread and scrape
Bizhi': Bee ha'ii'kahii	**Choo i gih**: bee ha'ii'kah
NAME: Perforated Cadle	**USE**: Dip, stir and mix portion Control
Bizhi': bee ha'iikahii binikah da has dzaanigi	**Choo i gih**:
NAME: Box Grater	**USE**: Grate - Slaws
Bizhi': ni'masii do cheese bee yiigazii	**Choo i gih**: nimasii doo cheese be yiigaz
NAME: Wood Paddle	**USE**: Use to stir
Bizhi': tsin bee it na'a tsii	**Choo i gih**: bee itna'a tsih
NAME: China Cup	**USE**: Strain, gravies, soups, sauces
Bizhi': bee ha'al'eetii	**Choo i gih**: bee ha'al'eet
NAME: Peel	**USE**: Pizza in oven
Bizhi': pizza bee hahakaahi	**Choo i gih**: pizza bee hahakaah

NAME: Pastry Tubes	**USE:** Decorate cakes, cookies
Bizhi': bah tikani bee nidaa'ch ahigi	**Choo i gih:** baah tikani bee nidaa'ch'ah
NAME: Rolling Pin	**USE:** Rolled dough
Bizhi': bee ak'ina'almasi	**Choo i gih:** bee ak' ina' al mas
NAME: Measure	**USE:** Liquids
Bizhi':	**Choo i gih:**
NAME: Scoop	**USE:** Serve food and control portion
Bizhi': Ice Cream bee hahakahii	**Choo i gih:** Ice Cream bee hahakah
NAME: Measuring Cups	**USE:** Measure Liquids
Bizhi': bee'ha'iizha'hi bee ida' hi bee ida'neel aa higi	**Choo i gih:** bee ida'neel'aah
NAME: Stock Pot	**USE:** Boil and simmer
Bizhi': bee abezhii nitsaaigi	**Choo i gih:** bee da'abeezh
NAME: Bakers Scale	**USE:** Bean scale
Bizhi': bee dah'adiidlohii	**Choo i gih:** bee dah da'diidleeh
NAME: Portion Scale	**USE:** Measure scale
Bizhi':	**Choo i gih:**
NAME: Hot Cakes or Meat Turner	**USE:** Turn hamburgers
Bizhi': Bee na'a'yoo'nilii	**Choo i gih:** bee na'ayoo'nit
NAME: Fongs	**USE:** Pick up serve
Bizhi': chi'yaan bee naajah	**Choo i gih:** Chi'yaan bee naajah
NAME: Kitchen Fork	**USE:** Hold roast to slice
Bizhi': bila' naaki'i	**Choo i gih:**
NAME: Scraper on Dough Cutter	**USE:** Scrape meat block, cut

	dough
Bizhi': bee igasii	Choo i gih: bee i gaas
NAME: Flour Sifter	USE: Lighter
Bizhi: ak'aan bee bi'gha' nildehi	Choo i gih:
NAME: Skewer	USE: heat inside, holdshape lines
Bizhi': bee itdahna' a' tihn	Choo i gih: bee itdahna'a' tih
NAME: Pastry brush	USE: Brush icing, egg wash
Bizhi':	Choo i gih:
NAME: Bench Brush	USE: Excess flour
Bizhi':	Choo i gih:
NAME: Pastry bag	USE: Decorating
Bizhi':	Choo i gih:
NAME: Pie or Cake Marker	USE: Portion
Bizhi': baah tikani bikehgo nehelgeshii	Choo i gih: baah tikani bikengo nehelgeesh

EQUIPMENT INVENTORY SHEET

Equipment Description

- Refrigerator
- Can Opener, Manual
- Pans, Assorted
- Butcher Knife
- Scales
- Measuring Cups & Spoons (Pints, Quarts, Gallons)
- Steam Table
- Sauce Pans
- Freezer
- Mixer, Electric
- Electric Slicing Machine
- Strainers
- Deep Freezer
- Meat Slicer
- Food Mixer (Electric)
- Roasting Pans
- Dipper-Ice Cream
- Coffee Pot, Electric
- Range-Electric (Institutional)
- Deep Fat Fryer
- Dishwasher-Electric
- Food Chopper (Electric)
- French Knife
- Stack Ovens
- Compartment Steamers
- Two-Deck Baking Ovens
- Steam Kettle
- Electric Grinder (Meat)
- Garbage Disposal
- Peeler
- Steam Jacketed Kettles
- Fire Extinguisher
- Grill-Griddle
- Meat Grinder
- Slicer (Power Driven)
- Blender
- Double Boiler
- Cleaver
- Power Mixer
- Can Opener, Electric
- Chicken Fryer
- Range-Gas
- Carving Set
- Broiler
- Vegetable Peeling Machine
- Cold Food Server
- Potato Masher (Hand)

- Two-Deck Steam Cooker
- Toaster-Individual
- Coffee Pot, Regular
- Hot Top
- Toaster-Conveyor
- Egg Slicer-Hand Operated
- Teapots
- Cash Register
- Vacuum Cleaner
- Bun Fillet Steamer
- Egg Poacher
- Micro-Wave Oven
- Bain-Marie
- Oil Stone
- Frying Pan (Electric)
- Gas Broiler
- Charcoal Broiler
- Waffle Iron
- Electric Juice Extractor
- Emery Wheel
- Tenderizing Machine
- Power Meat Saw
- Band Saw
- Paresian Cutter
- Adding Machine
- Vegetable Shredder
- Vegetable Dicer
- Vertical Cutter Mixer
- Revolving Oven
- Meat Pattie Machine
- Proof Box
- Soft Ice Cream Machine
- Insulated Food Container
- Hand Utensils (i.e. Meat, Fork, Scoop, Ladle, and Serving Spoon)
- Rotisserie
- Milk Cooler
- Ice Maker
- Braiser
- Waste Equipment System (Compactor
- Mop, Bucket, Wringer
- Broom
- Brush
- Ice Cream Freezer
- Band Saw

CULINARY TERMS

The learner will know the following terms:

Aging: A term applied to meat held at a temperature of 34 to 36 degrees F. Tough connective tissues are broken down through the actionof enzymes thereby increasing tenderness.

Agneau: (an-yó) (Fr.) Lamb.

á la: (ah-lah) (Fr.) According to the style of, such as: a la Francaise or according to the French way.

á la Bourgeoise: (ah-lah-boor-jwahz') (Fr.) Family style. See Bourgeoise.

á la Broche: (al-lah-brosh') (Fr.) Cooked on a spit over or in front of an open fire. See Brochette.

á la Carte: (ah-lah-cart) (Fr.) Foods prepared to order: each dish priced separately.

á la King: Foods served in a white cream sauce which contains mushrooms, green peppers and often pimientos.

á la Mode: (ah-lah-mod') (Fr.) Usually refers to ice cream on top of pie, but may be other dishes served in a special way. See Beef a la Mode.

á la Provencale: (ah-lah-pro-vahn-sal) (Fr.) Dishes with garlic and olive oil. See Provencale.

á la Russe: (Fr.) The Russian way.

Allemande Sauce: (ah-le-mahnd) White, reduced veloute, egg yolks and cream.

Allumette Potatoes: (all-eu-met) (Fr.) Cut like large matches, similar to Shoestring Potatoes and Pommes Paille.

Amandine: (Fr.) Made with or garnished with almonds.

Andalouse, á l: (ahn-dah-loosé) Prepared the Andalusian (Spain) way. Consomme and Potage: Tomatoes and rice. Garnish: Tomatoes, rice, eggplant, red peppers. Sauce: Mayonnaise with tomatoes and red peppers. Spanish onions, cucumbers, tomatoes, eggs, oil-vinegar.

Anglaise: (ahn-glauz) (Fr.) In the English style.

A.P.: As Purchased.

Appareil: Mixture of different elements for preparation for a dish. (i.e. Chicken Croquette mixture).

Argenteuil: (ahr-zhahn-toy) (Fr.) Consomme: With asparagus. Poached or scrambled eggs with asparagus tips. Garnish: Asparagus points with Hollandaise.

Aspic: (as-pick) (English) Clear meat, fish or poutry jelly.

au Gratin: (oh-grah-tan) (Fr.) Food covered with a sauce sprinkled with crumbs or cheese and baked.

au Jus: (oh-zhué) (Fr.) (Literal: with juice) Served with natural juices or gravy.

au Lait: (oh-lay) (Fr.) With milk.

au Naturel: (oh-nah-tue-rel) (Fr.) Plainly cooked. See Nature.

aux Croutons: (Fr.) With bread cut in small dice and fried in butter.

Avocado, also Avocat: Alligator pear. Brownish or purple berry filled with pulp-like marrow, from Southern California, tropical America and West Indies.

Bain Marie: (Fr.) Double boiler insert or steam table.

Baking: To cook by hot moist heat, usually in an oven.

Bar le duc: (bah-le-duek) (Fr.) Famous jam made of red currants.

Bard: To wrap poultry, game or fish with thin slices of fat or salt pork.

Baste: To moisten or spoon over a food product with stock, drippings, or fat while cooking.

Barley, Pearl: Polished barley.

Batter: Mixture of flour and liquid of a consistency that can be stirred.

Bean Sprouts: Mung beans from China. Sprouts are tiny and green when used for the preparation of Chinese dishes.

Béarnaise: (bay-ahr-nayz) (Fr.) Name of sauce derived from Hollandaise Sauce. Contains egg yolks, butter, tarragon and seasoning. Also name of a region in France.

Beating: Regular lifting and stirring motion to bring mixture to smooth texture and often for the purpose iof incorporating air into the mixture.

Béchamel: (bay-shah-mel) (Fr.) A rich cream sauce or white sauce.

Beef Stroganboff: Tenderloin of beef sauteed with sauces and enriched with our cream.

Beef, Dried: Soaked in brine and then smoked and dried.

Beurre: (burr) (Fr.) Butter.

Beurre Noir: (burr-hwahr) (Fr.) Butter cooked to a dark brown to which capers and a dash of vinegar are added.

Beurre Noisette: (burr-nwah-zet) Hazelnut butter achieved by melting butter until it turns lightly brown.

Bind: To cause to cohere, unite, or hold together, such as bind a croquette mixture. (Often with egg yolks or a liaison.)

Bisque: (bisk) (Fr.) Thick cream soup or puree, usually of shellfish, bivalves and crustaceans.

Bisque Ice Cream: High butter-fat content ice cream with dried macaroons or sponge cake crumbs.

Blanc: (blahn) (Fr.) White.

Blanch: 1. To boil in water and cool before cooking or freezing, to cleanse and maintain color. 2. To partially cook as with broiled bacon. 3. To dip in boiling water to remove skins from tomatoes, fruits and nuts, etc.

Blanquette d'Agneau: (blahn-ket-dahn-yo') (Fr.) Stewed, blanched lamb with white sauce. Usually shoulder and breast.

Blending: Thoroughly mixing two or more ingredients.

Blue Cheese: See Cheese, Blue.

Blinis: Russian buckwheat pancakes. Usually served with caviar.

Boeuf: (buff) (Fr.) Beef.

Boiled Dressing: Cooked dressing for salads.

Bonne Femme, á la: (bun-fam) (Fr.) Potage: With potatoes, leeks, carrots, onions. Fish: With onions, chopped parsley, shallots, mushrooms and white wine.

Bordure: (bohr-dur) (Fr.) With Duchesse potatoe border, used in garnishing.

Borscht: (bohrsht) (Russian) A Russian or Polish soup made with beets and duck. Sour cream is often added.

Bouchée: (boo-shay) (Fr.) Small meat pattie or pastry shell filled with meat, poultry or lobster. Sometimes filled with fruits.

Brunoise: (Brun-wahz) (Fr.) Cut in fine rice.

Buffet: Display of ready to eat hot and cold foods. Often self-service from table of assorted foods.

Café: (kah-fay) (Fr.) Coffee.

Calorie: The heat required to raise 1 gram of water 1 degree centigrade.

Calories: Fuel value in food. A unit expressing the heat-producing or energy-producing value of food. 1 calorie = 3.968 B.T.U.

Calavo: Trade name for California Avocados.

Canadian Bacon: Trimmed, pressed, smoked loin of pork. Lean.

Candying: Cooking fruit in heavy syrup until transparent; then drain and dry.

Canapé: (kah-nay-pay) (Fr.) An appetizer. Always prepared on a base, such as bread, toast or crackers.

Canard: (kah-nahr) (Fr.) Duck.

Cannelon: (kan-ay-lohn) (Italian) Pasta or crepe stuffed with meat or cheese and served with a tomato or meat sauce.

Capon: (kah-pohn) Castrated poultry noted for its tenderness and delicate flavor.

Cardinal Sauce: Bechamel with shrimp or lobster coral and lemon juice.

Casaba Melon: Lemon yellow skin, white meat, large oval shape, season September to April.

Caviar: (ka-vee-aré) Eggs or roe of fish, grey and black, usually sturgeon. Seasoned. Caviar from salmon is red.

Cayenne Pepper: Hot seasoning. Red and pungent in powder form, now used in liquid form. Hot pepper sauce.

Celestine Consommé: (say-less-teen) (Fr.) Consomme with sliced unsweetened pancakes.

Cépes: (sep) (Fr.) Species of mushrooms.

Champignons: (shahm-pee-nyohn) (Fr.) Mushrooms.

Chanterelles: (shahn-tee-rels) (Fr.) Species of mushrooms.

Chantilly Cream: (shahn-tee-yeé) (Fr.) Vanilla whipped cream.

Chantilly Sauce: (shahn-tee-yeé) (Fr.) Hollandaise sauce with whipped cream.

Chasseur: (shah-seur) (Fr.) (Literal: Hunter Style) Items prepared and served in a tomato sauce with mushrooms, wine, etc.

Chateaubriand: (shah-toh-bree-ahn) (Fr.) Thick double tenderloin steak broiled or sauteed and then sliced. The name of a French author and a great gourmand.

Chaud: (show) (Fr.) Hot.

Chaud-froid: (show-fro-ah) (Fr.) Cold sauces usually bechamel or a veloute with the addition of gelatine used to mask cold food platters for buffets.

Cheese, Blue: Similar to Roquefort in appearance but made of cow's milk instead of sheep's milk.

Chef: (shef) (Fr.) Chief of kitchen.

Chemiser: (shi-miz-ai) (Fr.) To coat with chaud-froid or aspic.

Chiffonade: (shee-fohn-ahd) (Fr.) Shredded vegetables or meats used in soups or salads, or as garnishings. Also dressing: Shredded and chopped vegetables in French Dressing base.

China Cap: A cone shpaed strainer or sieve. Also referred to a "chinois" (French).

Ciseler: (Fr.) To cut, to make an incision in the skin of fish and meat so that it will not crack during cooking.

Clarify: To make clear, by adding a clarifying agent which removes suspended particles such as in the preparation of consommé.

Cloche, sous: (Fr.) Under bell, usually glass.

Cobbler: (drink) Liquor, sugar, sliced fruit and mint. Fruit dessert. Cobbler Deep Dish Fruit Pies.

Cocotte: (Fr.) Small earthen cooking ware. Oeufs En Cocotte (Eggs in Cocotte).

Coddling: Cooking just below boiling point. Coddled Eggs.

Colbert Sauce: Shallots, butter, claret, brown gravy, butter, lemon.

Compote: (kom-pot) (Fr.) A stewed fruit or combination of fruits; sometimes applied to a stew of birds.

Concasser: (Fr.) To chop coarsely. A coarse mince.

Condiments: Seasonings and appetizing ingredients added to food.

Consommé: (kahn-so-may) (Fr.) A strong, clear, sparking broth clarified and enriched by the addition of lean chopped beef, egg whites and aromates which coagulate and are removed after clarification.

Coquille: (koh-kee) (Fr.) Shell.

Copper: Metal cooking unit, stationary, heated with steam jacket.

Court Bouillon: (Fr.) Literally, short broth. A preparation of vinegar or wine, water and savory herbs in which fish is cooked.

Cover Charge: Fixed fee for table service independent of the charge for food.

Crecy: (Fr.) Items composed of, or garnished with carrots.

Crépe: (Krep) (Fr.) Thin pancakes.

Crépes Suzette: Thin french pancake served with rich butter, citrus and brandy sauce.

Cresson: (Kray-sohn) (Fr.) Watercress.

Croquette: (kro-ket) (Fr.) A food product or combination of food products, usually breaded and deep fried.

Croutons: (kroo-tohn) (Fr.) Small pieces of fried or toasted bread used in soups.

Cuisine: (kwee-zeen) (Fr.) Art of cookery, cookery, also kitchen.

Cumberland Sauce: Orange and lemon peel julienne and juice, currant jelly, port wine and ground ginger.

Curry: East Indian dish. Was originally a stew. Now referred to with mixing of pungent curry seasoning.

Curry Powder: A mixture of powdered spices.

Deglaze: To moisten a roast pan or saute pan with wine, vinegar stock or water in order to dissolve the caramelized drippings so that they might be incorporated into the sauce.

Dejeuner: (day-zhoe-nay) (Fr.) Lunch or mid-day meal. Petit Dejeuner-breakfast.

Demi: (de-mee) (Fr.) Half.

Demi-glace:(de-mee-glahs) (Fr.) A reduced espagnole sauce.

Diable: Devilled.

Diced: Cut in small squares.

Dindonneau: (dan-doh-noh) (Fr.) Young turkey.

Drawn butter: Melted butter.

Dredging: Coating with dry ingredients (as flour).

Drippings: The fat and juice which drops from roasting meat.

Dry: As applied to a beverage meaning a low percentage of sugar. As with vin sec-dry wine.

Du Barry: (Fr.) Garnish of cauliflower.

Duchesse Potatoes: Mashed with eggs and squeezed through a pastry tube.

Dugléré: (du-glay-ray) (Fr.) With onions, shallots and tomatoes.

Dusting: Sprinkling with flour and sugar.

Ecossaise: (Fr.) Scottish style

Eggplant: Large, purple, pear-shaped vegetable.

Eggs a la Goldenrod: White sauce with chopped whites of eggs poured over toast. Hard cooked yolks pressed through sieve and sprinkled on top.

Eggs Benedict: (bay-nay-dick) Poached and served with ham or tongue with hollandaise sauce on a toasted muffin.

Emincé: (ay-man-say) (Fr.) Cut fine.

Emincé of Beef: (ay-man-say) (Fr.) Thin slices of meat.

en Bordure: (en-hohr-dur) (Fr.) In a Duchesse Potato Border.

en Brochette: (ahn-broh-shet) (Fr.) On a skewer. See a la Broche.

en Casserole: (ahn-kahs-rol) (Fr.) Food served inthe same dish in which it was baked. A fireproof dish and cover.

Enchiladas: Mexican. Tortillas covered with sauce of grated cheese, spices, etc.

en Chemise: (Fr.) With their skins. Usually potetes. Mashed with a chaud-froid or aspic.

en Coquille: (ahn-koh-keé) (Fr.) In the shell. As with oysters on the half shell.

E.P.: Edible Portion.

Epigramme: (eh-pee-grahm) (Fr.) Small cuts of lamb, meats, poultry and and game cooked, cooled, bread crumbed and fried.

Escoffier: (ays-koh-fee-ay) Name of famous French chef, master of modern classical cuisine. Also trade name for bottled sauce--Escoffier Sauce.

Espagnole Sauce: Basic brown sauce, see recipe in text, p. 312.

Farce: (fahrs) (Fr.) Stuffing. Forcemeat.

Farci: (Fr.) Stuffed.

Farina: The coursely ground inner portion of hard wheat.

Farinaceous: Consisting of or made of meal or flour.

Fermiére: (fair-mee-air) (Fr.) With discs of carrots, turnips, onions, potatoes, celery, cabbage. Farmer's style.

Filet: (fee-lay) (Fr.) May be tenderloin of beef, mutton, veal or pork without bone. Boned fish are also called fillets.

Filet: French

Fillet: English

Finnan Haddie: Smoked haddock.

Fleuron: (Flurr-ohn) (Fr.) Puff paste baked in crescent shape used as a garnish, usually with fish in white wine sauce.

Florentine: (floor-ahn-teen) Literally, as prepared in Florence. With spinach.

Foie-gras: Foie d' oie: (fwah grah) (Fr.) (fwah dwah) Fatted goose liver, most often from the Strasbourg region of France.

Fondantes, Potatoes: Oval shaped, partially cooked by boiling, reshaped in towel and finished in oven.

Fondue: (fohn-du) (Fr.) Melted Swiss Cheese dish. See Welsh Rabbit.

Forcemeat: Chopped meats and seasoning used for stuffing.

Forestiere: (Fr.) Garnished with mushrooms.

French Lamb Chops: Made by scraping the meat and fat from the bones of rib chops a little distance from the end. Broiled over high heat.

Fricassée: (Fr.) In modern usuage, applies to a method of preparing poutry and sometimes veal in a white sauce.

Frizzling: Cooking in small amount of fat until crisp.

Froid: (Frwa) (Fr.) Cold.

Fromage: (froh-mahzh) (Fr.) Cheese.

Fumet: (foo-meh) (Fr.) A concentrated broth of fish, game and/or vegetables.

Garbanzo: (gar-ban-tho) Chick peas. Spanish national dish.

Garde-Manger: (guard-mon-shay) (Fr.) Cold meat department, larder or person in charge of it. Larder cook.

Garnish: To embellish foods; to decorate. Also a noun, referring to a foodstuff being used to garnish.

Garniture: (gar-nee-tur) French for garnish.

Gastric: (gas-treek) Cooking term for a mixture of white wine or vinegar, crushed pepper, shallots and spices.

Gateau: (gah-toh) (Fr.) Cake.

Gaufres: (goh-fr) (Fr.) Wafers.

Gaufrette Potatoes: (goh-fret) French fried potatoes in waffle form.

Gefilte Fish: Jewish favorite. Literally, stuffed fish. Today in dumpling form.

Gherkins: Small cucumbers (a few days old). Usually pickled.

Giblets: Liver, heart and trimmings from poultry.

Glaze: A semi-transparent or glossy coating. To cover with same.

Gnocchi: Italian for light dumplings.

Gourmet: (goor-may) (Fr.) Connoisseur of food and drinks.

Gratin au: (grah-tan) (Fr.) Sprinked with cheese or buttered crumbs and baked brown.

Gratinée: (Fr.) To brown, usually by topping an item with crumbs, cheese, etc.

Gruyére: (grue-yair) Swiss cheese, also made in France and elsewhere. More tart and with smaller holes than the cheese commonly called Swiss Cheese.

Guava: Tropical fruit: Apple or pear shaped, acid sweet flavor. Made into jams and jellies.

Gumbo: (soup) Chicken, onions, okra, green peppers and tomatoes.

Haché: (hah-shay) (Fr.) hashed; minced.

Haricots Verts: (ah-ree-coh-vair) (Fr.) Small green string beans.

Hasenpfeffer: German rabbit stew.

Heifer: A young female cow that has not had a calf.

Herb bouquet: Mixed herbs tied and used for seasoning.

Hongroise, á la: (ohn-grwahs) Prepared in Hungarian way. Onions, sour cream and paprika. Garnish: With red and green peppers, cabbage and leeks.

Hors d oeuvre: (ohr-duh-vr) (Fr.) Small relishes or appetizers. Served as first course of the meal. See anitpasto, Assiette Parisienne. A foretaste.

Hush Puppies: Southern deep fat fried dish of corn meal, baking powder, milk, onion, seasoning.

Hydrogenated Fat: Fat treated with hydrogen to maintain stable consistency.

Indian Pudding: Slow baked dessert of corn meal, milk, brown sugar, eggs, raisins and seasoning.

Infusion: Liquid obtained from steeping a food, spice, flower or plant. A wide varity of herb infusions are consumed in Europe for therapeutic purposes.

Johnny Cake: Bread from yellow corn meal, eggs, milk.

Julienne: (zhu-lee-en) (Fr.) Potatoes: cut in long slices thinner than for French fries and served very crisp. Soup: Clear soup with thin strips of vegetables. Meats, Poultry and Vegetables: Cut in narrow 1 1/2 inch strips.

Junket: Brand name of dessert of flavored curdled milk and rennet.

Jus: (zhue) (Fr.) Juice; usually refers to juices from meat. See au Jus.

Karo: Corn syrup, light or dark.

Kasha: Buckwheat groats.

Kippered Herring: Dried or smoked herring.

Kitchen Bouquet: Trade name for bottled gravy coloring and flavoring.

Kosher: (meat) Meat sold within 48 hours after butchering in accordance with prescribed Hebrew religious laws. Or style of cooking adhering to Jewish dietary restrictions.

Kumquats: Gold-orange colored, small, oval citrus fruit.

Lait: (lay) (Fr.) Milk.

Lambs' Sweetbreads: Ris d'Agneau, French

Langouste: (lahn-goost) (Fr.) Crawfish.

Larding: Strips of salt pork inserted into meat with a special larding needle.

Lardons: (Fr.) Strips of salt pork used for larding and as a garnish. Also, julienne of bacon.

Leek: Small onion-like plant, used as a vegetable or aromatic seasoning.

Legumes: (lay-gyoom) (Fr.) Vegetables. Also refers to such dried foods as beans, peas and lentils.

Lentil: Flat seed somewhat like peas. Used for soups and garnishes. Brown and yellow. Esau sold his birthright for a pottage of lentils (Genesis).

Liaison: (lee-ay-zohn) A binding agent for sauces, usually cream and egg yolks.

Lychee Nut: (Chinese) Small hard shell dried out.

Lyonnaise Potatoes: (Fr.) Sliced and sauteed with slices of onions.

Mace (seasoning): Outer shell of nutmeg.

Macedoine: (mah-say-dwan) (Fr.) Mixture usually of fruit or vegetables. Macedoine de fruits: Fruit salad.

Madriléne Soup: (mah-dree-lain) Clear consomme with tomato, highly seasoned, served jellied or hot.

Maggi: Brand name for Swiss liquid seasoning.

Máitre d'Hotél: (mai-tr-doh-tel) (Fr.) Head of catering department; head of food service.

Máitre d'Hotel, a la: (mai-tre-doh-tel) Sauce: Yellow sauce. Butter Sauce, lemon juice, parsley, salt, pepper. Butter: Mixture of lemon juice, butter, parsley, salt, pepper.

Manhattan Clam Chowder: With tomatoes, vegetables and quahog clams.

Maraschino: (mah-rahs-kee noh) Italian cherry cordial. Also cherries.

Marengo, á la: Sauteed Veal (or chicken) with mushrooms, tomatoes, olives and olive oil. Named after the Battle of Marengo, fought by Napoleon and his troops.

Bone Marrow: Soft tissue from the inside or cavity of bones.

Vegetable Marrow: A member of the squash family.

Marsala: Pale golden, semi-dry, Italian wine from Sicily.

Masking: To cover completely (usually with a sauce or aspic).

Mate: (mah-tay) South American Paraguay tea.

Matelotes: (mah-te-lot) Fish stewed with wine, onions and seasoning. Fish Stews.

Melba: Vanilla ice cream, raspberry jelly or sauce and whipped cream served with peach or pear.

Melba Toast: Very thin white bread baked in oven until golden brown and very crisp.

Menthe: (Fr.) Mint.

Menthe, Creme de: (krem-de-mahnt) Peppermint cordial.

Melting: Making liquid by application of heat.

Menu: (men-u) or (may-nu) Bill of fare.

Meringue: (may-rang) Paste made of egg whites and sugar, souffled.

Meuniére, á la: (me-nee-air) (Fr.) Fish: Dipped in flour, sauteed in butter, served with brown butter and lemon, sprinkled with parsley.

Mignon Filets: Small tender filets usually from beef, pork, lamb and veal tenderloins.

Milanaise: (Fr.) Garnish consisting of julienne of ham, tongue, mushrooms and truffles. Literally, as prepared in Milan, Italy.

Minced: Chopped or ground fine.

Mincing: Chopping inless regular parts, similar to grinding.

Minestrone: (mee-nay-stroh-nay) Vegetable soup with a macaroni product and cheese.

Mirepoix: (mere-eh-pwah) (Fr.) Mixture of onions, carrots, celery used to flavor stocks, soups, sauces, stews, pot roasts and roast meat and poultry in marinades.

Mixing: Uniting two or more ingredients.

Mongol Soup: Tomatoes, split peas, julienne vegetables.

Morilles: (mo-riy) (Fr.) Morels, a species of mushrooms.

Mornay: (Fr.) A cheese sauce; cream sauce with the addition of cheese and a liaison.

Mortadella: Italian pork and beef sausage.

Mousse: (Moose) (Fr.) Frozen dessert of whipped cream, flavoring and sweetening. May also be hot or cold buffet food made with meat, fish and poultry products.

Mouton: (moo-tohn) (Fr.) Mutton.

Mozzarella: Soft Italian cheese made of milk, shaped in rounds.

Mushroom Sauce: Brown or white sauce, fat, flour, stock, sliced mushrooms, seasoning and with the addition of wine.

Navarin: (nah-vah-rahn) (Fr.) Stew of mutton with onions, celery, carrots, turnips, tomatoes, peas and cut green beans. See Ragout.

Noir: (nwar) (Fr.) Black.

Nouilles: (noo-ee) (Fr.) Noodles: Narrow strips of dried dough, resembling macaroni, used in soups and garnishes.

Oeuf: (uff) (Fr.) Egg.

Okra: Vegetable pods. Used in soups, gumbos. Also served as a vegetable.

Ovaltine: Brand name for a flavored malt and milk powder for milk drinks.

Over-Run: Increased volume produced by whipping in air as in ice cream.

Oysters, Blue Points: Name of oysters from certain Atlantic Coast waters.

Pain: (Pan) (Fr.) Bread.

Pan Broiling: Cooking uncovered in a hot skillet. Fat is poured off in cooking.

Palm hearts: Hearts of young palms. A canned product.

Panache: (pah-nash) (Fr.) Several kinds of mixed birds, fruits, vegetables, usually with contrasting colors.

Papaya: Tropical fruit, the juice of which yields an enzyme used as a meat tenderizer.

Papillote: (pah-pee-oht) (Fr.) Cooked in parchment paper or foil to seal in flavors.

Paprika: Dried and powdered or ground ripe fruit of various kinds of peppers. Used as seasoning and for color.

Parboiling: Boiling for a short period to partially cook.

Parisienne Potatoes: Parisian potatoes made with a small round scoop. Browned, boiled or steamed.

Parmentier: (parmahn-tee-ay) Soup: Potatoe Soup. A French 18th century alchemist who introduced the potato ot France.

Parmesan: hard, sharp cheese grated for soups, toppings and souffles.

Parsley: An herb used laregly for garnishing.

Pauteurized Milk: Milk held 140 degrees F. for 30 minutes to destroy potentially harmful microbes.

Pastry Bag: Cone bag with metal tip at small end. Used to decorate cakes.

Paysanne: (pay-sahn) (Fr.) (Literal: Peasant Style) Vegetables cut into regular square shapes.

Paupiette: (poh-pee-et) (Fr.) Stuffed rolled thin slices of meat, fish and poultry braised.

Peche: (pesh) (Fr.) Peach.

Petit: (puh-tee) (Fr.) Small.

Petit Dejeuner: (puh-tee-day-zhuh-nay) Breakfast.

Petite Marmite: (puh-teet-mahr-meet) (Fr.) A strong consomme with beef, chicken and vegetables. The name of the earthenware pot it is cooked in.

Petits-Fours: (puh-tee-foor) (Fr.) Small cakes and cookies generally served with desserts.

Petits Pois: (puh-tee-pwa) Small green peas.

Picnic Ham: Lower end of hog shoulder.

Piece de Risistance: (pee-es-de-ray-zee-stahns) (Fr.) Main dish.

Pilau: (pee-loh) Rice sauteed with onions and moistened with white stock. Also spelled pilaf and pilaw.

Pimiento: Red sweet Spanish pepper pod.

Piquant: (pee-kahn) (pee-kahnt) Flavored, highly seasoned. A piquant sauce is delightfully pungent.

Pistachio Nuts: Small, pale green inside. Thin hard shell. Tropical.

Plank: A board made of hard wood. Also to cook and serve on a board or plank, usually with an elaborate garnish of vegetables. As with planked steak, fish and poultry.

Poaching: Cooking in water that bubbles lightly. Simmering at 205 F.

Poisson: (pwah-sohn) (Fr.) Fish.

Poivrade (Sauce): (Pwav-rahd) A brown peppery sauce.

Polonaise: (poh-loh-nayz) (Literal: Polish) Garnish consisting of fresh bread crumbs browned in butter, chopped hard cooked egg, beurre noir and chopped parsley.

Pommes de Terre: (pom-de-tair) (Fr.) Potatoes. Literal translation--apples of the earth.

Popovers: Individual, quick, puffed-up, batter rolls of milk, flour and eggs.

Postum: Coffee substitute made of cereal.

Potage: (poh-tahzh) (Fr.) Soup, usually thickened.

Pot-au-feu: (pot-oh-fé) (Fr.) Meat broth with meats and various vegetables.

Potiron: (poh-tee-rohn) (Fr.) Pumpkin.

Potpourri: (poh-tee-rohn) (Fr.) Mixture.

Poulet: (poo-let) (Fr.) Chicken.

Portion Control: Control of size and weight of individual portions.

Poulette Sauce: Allemande sauce with sliced mushrooms and chives or parsley.

Prefabricated: Refers to meat, and associated products trimmed and cut; often ot specification of purchaser.

Printaniére: (prahn-tahn-yair) (Fr.) Garnish of spring vegetables cut in small dice.

Profiterolles: Small balls of pate-a-choux used for a garnish.

Pullman Bread: Sandwich bread.

Purée: (pu-ray) (Fr.) Pulp or paste of vegetables or fruit. Thick soup.

Quahaug: (kwah-hawg) Atlantic Coast round clam.

Quenelles: (kay-nel) (Fr.) Dumplings.

Ragóut: (rah-goo) (Fr.) Thick savory stew. See Navarin.

Raisins: (ray-san) Dried grapes on the vine.

Ramekins: Food baked in shallow baking china or shallow baking dish itself.

Rasher of Bacon: (English) A slice of bacon.

Reduce: To reduce volume by cooking or simmering.

Rendering: Freeing fat from connective tissues by heat

Rice, Brown: Rice with hulls on. Before polishing.

Ris de Veau: (Ree-de-Voh) (Fr.) Veal sweetbreads (thymus gland).

Rissole: (ree-soh-lay) (Fr.) Browned.

Risolé Potatoes: (Pommes rissolees) Cut into shape of an egg and browned. Cooking finished in the oven.

Riz: (ree) (Fr.) Rice.

Roasting: Cooking in the oven--dry heat.

Robert Sauce: (sauce ro-bair) Brown sauce. Onions, flour, stock, lemon juice. French mustard, white wine.

Roe: Mass of fish eggs. Single fish egg. Female-hard roe, Male-soft roe.

Romaine: (ro-main) Long, narrow crisp-leaved Roman lettuce, inner leaves are light in color. Long-leaved cos lettuce.

Róti: (ro-tee) (Fr.) Roast.

Rouge: (roozhi) (Fr.) Red.

Roulade: (Fr.) A rolled piece of thin meat.

Roux: (roo) (Fr.) Equal parts of fat and flour cooked; used to thicken sauces and gravies. Light-blonde and dark roux.

Rusks: Light bread or biscuit, sometimes twice baked.

Russian Dressing: Mayonnaise, lemon juice, chili sauce and Worcestershire sauce and chopped pimeintoes.

Sabayon: (sah-bah-yohn) (Fr.) Dessert--Egg dish served in glasses. Whipped egg yolks, vanilla, sugar, sherry, white wines.

Saffron: Seasoning. Deep orange dried part of purple crocus. To color and flavor rice, national dishes and saffron cakes.

Sage: Leaves of an herb. For seasoning.

Salamander: A broiler-like stove with heat from above and a shelf below. Open front so that dishes can be put on lower shelf for glazing.

Salami: (sah-lah-mee) Sausage of pork, beef, red wine, highly seasoned.

Salmagundi: Mixture, usually refers to pickled meat, fish, onions, vegetables and seasoning.

Salmis: A type of sauce or ragout made from partially cooked game. Leftovers can be utilized for this preparation.

Sauté: To cook quickly ina small amount of fat.

Searing: Browning surface of meat by intense heat, under the broiler, on top of the range and in an oven.

Sec: (sek) (Fr.) Dry as with vin sec--Dry wine.

Semolina: Flour high in gluten that is made from durum wheat.

Serviette: (Fr.) A table napkin.

Shad: Fish of the herring family.

Shallots: Vegetables of the onion family (Echalotes, French).

Shaslik of Lamb: (Brochette of Lamb) Lamb seasoned and broiled on a skewer.

Shirred Eggs: (Oeufs au Plat) Baked in cooking china, shirred egg dishes, with butter.

Shoestring Potatoes: Like French Fried, but cut very thin. See Allumette, Paille.

Simmering: Slow cooking at just below boiling point from 205 F. to 210 F. As poaching.

Sizzling Steak: Steak served on aluminum platter which has been heated so that the steak and juices sizzle.

Skewering: To fasten meat, poultry, fish or vegetables on long pin during cooking.

Skim: Using a skimmer or ladle, to remove scum or grease accumulated on the surface of a stock, soup or sauce.

Smogasbord: (smur-goes-board) Swedish tidbits or appetizers usually arranged on large table.

Smother: To cook vegetables in covered kettle until tender.

Soirée: (swah-ray) (Fr.) Evening party.

Sole: (sohl) Flat white fish common to Europe. Dover Sole. Also flat fish from the Pacific Coast of the United States.

Sommelier: (soh-meh-lyay) (Fr.) Wine waiter.

Soufflé: (soo-flay) Light puffed baked custard, consisting of a sauce and eggyolk mixture to which a puree or flavoring is added and into which stiffly beaten egg whites are gently folded.

Soufflé Potatoes: (soo-flay) Potato slices puffed up like little pillows.

Sous Clouche: (su-klush) (Fr.) Under bell, usually glass.

Soy Sauce: Made from soy beans. Brown. For flavoring Chinese foods.

Spanish Rice: With onions, tomatoes, green peppers and saffron.

Sparkling Burgundy: Bright ruby sparking wine.

Spit: A pointed rod to hold meat or poultry for roasting in front of fire.

Split: 6 oz. size bottle.

Spumoni: (spoo-mah-nee) Fancy Italian ice cream.

Squab: Young pegion.

Steaming: Cooking in steam in an enclosed chamber.

Steeping: To soak in liquid below boiling point to extract flavor or color, as for tea.

Steer: A young castrated beef animal.

Sterilizing: Destroying bacteria and microorganisms by boiling water, heat or steam.

Stew: Cooking in liquid or sauce with accompanying vegetables and meat.

Stewed Fruit: Simmering fruit in a sweetened liquid.

Stirring: Mixing food in circular motion.

Stock: The liquid in which meat, poultry, fish or vegetables have been cooked. Brown or white.

Sub Gum: (Chinese) Base of many Chinese dishes. Bamboo shots, whater chestnuts, fresh mushrooms.

Suet: Hard protective fat in beef, veal, mutton and lamb around the kidneys.

Suisse, a la: (swees) Swiss style.

Sweetbreads: Thymus gland of calf or lamb.

Swiss Chard: Green tender leaf vegetables prepared like spinach.

Tabasco: Brand name for hot red pepper sauce.

Table d'Hóte: (tahbl-doht) (Fr.) Fixed price meal.

Tartare Steak: Raw hamburger steak seasoned and garnished.

Tasse: (tahss) (Fr.) Cup.

Tea, Black: (India, Java, Ceylon) Leaves are fermented.

Tea, Green: Mostly from Japan, unfermented.

Tea, Oolong: (Formosa) Semi-fermented.

Tea, Orange Pekoe: Pekoe refers to downy appearance of underside and ends of leaf buds.

Terrine: (Fr.) An earthenware jar used for the making of pate and potted meats. Served cold.

Téte: (tet) (Fr.) Head.

Thyme: An herb for flavoring.

Timbale: (tahm-bahl) (Fr.) Mold for baking.

Timebale: (Fr.) A small pie curst baked; mold filled with chicken, fish, vegetables or cheese.

Tortillas: Mexican flapjacks or griddle cakes made from corn.

Tournedos: (Fr.) Small slices taken from the heart of the filet of beef.

Tripe: The inner lining of the beef stomachs.

Truffles: Fungus, like mushrooms, grown underground; a seasoning and garnish. Grown mostly in N.E. Italy and S.W. France. (Fr.) Truffe.

Try Out: To cook fat until oil is out (as in making lard). Render.

Turkish Coffee: (Cafe turque) Strong, sweet coffee, made of equal amounts of pulverized coffee and sugar.

Tutti Frutti: (too-tee-froo-tee) Mixture of fruit as in ice cream.

Veal Birds: Thin slice of veal rolled around seasoned stuffing. May be stewed or cooked in covered casserole.

Veloute: (vel-oo-teh) (Fr.) Soup: A cream soup to which a liaison is added in addition to a puree of the desired garnish. Sauce: A thick, creamy sauce made by adding veal stock (and milk) to a bland roux.

Vermicelli: Long thin threads of pasta. Like spaghetti out finer.

Vert: (vair) (vairt) (Fr.) Green.

Viande: (vee-ahnd) Meat.

Vichyssoise: (Literal: As prepared in Vichy, France) A cream soup of potato and leeks, pureed.

Vin: (van) (Fr.) Wine.

Vitamins: Growth producing, health protective elements of food.

Vol-au-vent: (vohl-oh-vahn) (Fr.) Case made of puff pastry in which meat or poultry is served, usually covered with a crust lid.

Waldorf Salad: Celery, apples, nuts, whipped cream and mayonnaise on a bed of lettuce.

Washington Pie: Cake with raspberry or loganberry jam between layers.

Waterless Cooker: Cooking utensils of heavy metal in which foods are cooked in their own juices with tight fitting covers as in pressure cooking.

Welsh Rabbit: Cooked cheese, butter, beer, eggs flavored with Worcestershire sauce and spices. (Fr.-Fondue a l'Anglaise).

Whipping: Rapid beating to increase volume of mixing air.

Wild Rice: Northern watergrass seed-served with game, not a true rice.

Won Ton: Noodle paste stuffed with ground chicken or pork and served in Chinese soup.

Yams: A tuber much like sweet potatoes. From the Southern United States and West Indies, South America and tropical countries.

Yorkshire Pudding: A batter of eggs, flour, milk and salt, baked with beef drippings and served with roast beef. Replaces bread when served.

Zabaglione: Italian for Sabayon but with Marsalawine. It is served in glasses with lady fingers and eaten with a spoon.

Zucchini: (tsoo-kee-nee) Italian squash.

Zwieback: (tsvee-bahk) Hard crispy German biscuit. Twice toasted.

ADDITIONAL RESOURCES

Arizona. Nutrition and Food Curriculum Guidelines. Phoenix: State Department of Education, 1973.

Carn, Luella L., and Mary Elizabeth Morrow. Final Report - Development and Evaluation of a Curriculum of Wage Earning Occupations. Harrisburg, Pennsylvania: Department of Public Instruction.

Coleman, Joan, Management of Food Service. Tallahasseee, Florida: Department of Education, 1970.

Course of study for Food Service. Toronto, Ontario, Canada: The George Brown College of Applied Arts and Technology.

Department of the Air Force. Job Inventory - Cook and Diet Therapy Career Ladders. Texas: Lackland Air Force Base, 1972.

Floria. Supervised Food Service: A Suggested Guide. Tallahassee: State Department of educaiton, 1969.

Food Service Careers. Des Moines, Iowa: Employment Security Commission, July, 1973

Food Service Employee. Lubbock: Home Economics Instructional Materials Center, Texas Technological College, 1968.

Gorman, Anna M. Employment Opportunities in which knowledge and Skill in Home Economics are Needed. Lexington: College of Education, University of Kentucky, June 1969.

Griswold, Bille. "Job and Task Analysis: Short Order Cook." Illinois Teacher for Contemorary Roles, Vol. XV, No. 4 (March - April), 1972), p. 170.

Hayes, Anne C. Post-Secondary Food Service Guide. Lexington: University of Kentucky, 1971.

"Long Each City College Content Outlines for courses in Home Economics Related Occupations." Illinois Teacher of Home Economics. Vol. IX, No. 4, (1965), p. 200.

Missouri. Food Service Curriculum: A Guide for Teachers. Jefferson City: State Department of Education in Cooperation with University of Misssouri, Occupational Home Economics Series #2.

Morris, Johnny M. "Job an Task Analysis: Entry Level Worker in Food Service." Illinois Teacher for Contemporary Rules, Vol. XV, No. 4 (March - April), p. 163.

Oklahoma. Home Economics Offerings for Area Vocational-Technical Schools in Oklahoma. Oklahoma City: State Deartment of Vocational-Technical Education.

Oregon. Occupational Cluster Guide, Food Service Occupations. Salem: Board of Education, May, 1970.

Pennsylvania. Curriculum Resource Materials for Developing Courses to Train Supervised Food Service Workers. Harrisburg: Department of Public Instruction, 1964.

Rahmlow, Harold, Le Roy Johnson, and Catherine Cavenagh. A survey Instrument for identifying Clusters knowledge and Competencies Associated with Performance of Food Servie Work. Olympia, Washington: State Board of Vocational Education and Department of Education, Wayne State University, Pullman, washington, December, 1966.

Schubert, Genevieve W. A Sample wage Earning Training Program for Short Order Cook. Wisconsin: Milwaukee Vocationa, technical, and adult Schools.

Stokes, J.W. How to Manage a Restaurant or Institutional Food Services. Dubuque, Iowa: William C. Brown Co., 1967.

Suggested Guide: Training Program for Food Service workers. Lexington: College of Education, University of Kentucky, 1967.

Training Programs for Food Servie Occupations. Lexington: Home Economics Occupational Training Program, University of Kentucky, 1969.

U.S. Departemtn of Labor. An Expoloratory Study to Analyze New Skill Content in Selected Occupations in Michigan and the Mechanism for Its Translation into Vocational Education Curricula. (Section Reprot on Chef/Cook). Columbus, Ohio: Battelle Memorial Institute, Columbus Laboratories.

U.S. Department of Labor, Manpower Administration. Food service Worker II. Washington, D.C.: Government Prinitn Office, July 1963.

Vermont. Proposal for Quanitity Foods: Introduction to Food service Employment. Montpelier: State Department of Educaiton, February, 1974.

Virginia. Home Economics Education Guide for Instruction Preparatory to Entering Food Service Occupations. Richmond: State Department of Vocational Educatio, February, 1970.

Welch, John. A Task Unit Concept for On-the-Job Training in Food Service. Columbia: Extension Division, Missouri University, 1966.

ANNOTATED RESOURCES

1. Amendola, Joseph and Lundberg, Donald E. *Understanding Baking.* Boston: CBI Publishing Co. Inc.: 1970.

This text is a professional baking book in outline form designed for the student dealing with the baking process, ingredients and their characteristics. The final section of the book provides suggested layouts for the bakeshop.

2. Crawford, Hollie W. and McDowell, Milton C. *Math Workbook for Food Service/Lodging.*

This text is included in the texts provided to CIT students as it is designed to assist students in independent learning. Math and English skills are keys to student employability in foood service. This book stresses math in the context the student will encounter it in the food service industry. It includes some useful tables and charts, diagnostic tests, the essentials of mathematics and businness situations involving mathemathics.

3. Fina, James, ed. English Skills by Objectives. New York: Cambridge Book Co., 1985.

This English Workbook includes pre and post tests, grammer fundamentals, and for each skill unit an explanatin of why each skill is needed. Book I in the series used by CIT Culinary students introduces the student to the different parts of the English language. The prime objective of the workbook is to improve student language skills including writing skills.

4. Haines, Robert G. *Food Preparation for Hotels, Restaurants, and Cafeterias.* 2nd ed. Alsup, Illinois: American Technical Publishers, Inc., 1982.

This text is available with a student guide and additional guide has been developed by the VESL Instructor to guide student work. Vocabulary lists based on the text are excellent. The introductory Chapters deal with the fundamentals: equipment, skills, cooking techniques and basic food products, sanitation, and safety. The remainder of the book focuses on food preparation techniques and includes over 700 recipes, some of which are used at CIT.

5. Haines, Robert G. *Math Principles for Food Services.* Albany, New York: Delmar Publishers, Inc., 1979.

This text begins with a review of basic math operations addition, subtraction, multiplication, division, fractions, decimals, and percents. Sections 2,3, and 4 deal with operational procedures for the preparation crew, the service crew and management. Section 5 closes with math related skills for one and all such as taxes, themetric system, and the checking account.

6. Haines, Robert G. *Student Guide for Food Preparation for Hotels,* Restaurants, and Cafeterias. 2nd ed. Homewood, Ill.: American

Technical Publishers, Inc., 1973.

A study guide for the textbook; includes short answer questions based on the reading.

7. Kercher, Mary Ann. Vocational Preparation Curriculum: Food Service. Columbia, Missouri: Instructional Materials Laboratory, 1982.

This text is a curriculum designed for the disadvantaged and handicapped student or to supplement regular training programs. It is well illustrated in outline form with little reading skill required. The units on storage, measurement, safety, equipment, and sanitation and especially useful for the bilingual student with limited English reading ability. The illustrations can be used by the instructor for overhead transparencies.

8. Sultan, William J. Practical Baking. Westprot, Conn.: The AVI Publishing Co., Inc., 1982.

A handbook for the experienced professional baker. Topics include Ingrediants and Their Properties, Bread and Rolls. Sweet Yeast Dough Products and Specialties, Biscuits and Muffins, Doughnuts and Crullers, Pies and Pastries, Cakes and Cake Specialties, Cookies and Specialized Baking such as Dietetic Baking, Baking with Sour Cream, Passover recipes, Pizza, and "Natural" Type Breads and Bakery Food Products.

9. Folsom, Leroi A. The Professional Chef, CBI Publishing Co, Fourth Edition, 1962.

*Preferred text: excellent as a comprehensive study of professional cookery.

10. Schoenberg, Hazel. Cookbook for Calorie watchers, good housekeepting, N.Y. MCMLXXI.

A resource and guide for meal planning techniques in addition to low calorie suggestions other special diets such as an allergy diet, bland, low residue & goll bladder diets, diabetic diets, low sodium diets and others are described.

11. Given, Meta. Modern Encylopedia of Cooking. J.G. Ferguson and Associates, Chicago, 1952.

The Chapter on buying staples, a question and answer section is especially useful.

12. Encylopdia of Cookery, 12 Volumes, Fawcett Publications, N.Y. 1966.

Vocabulary entries are useful as will as those on food items. Historical information and background and legends cab en utilized toward class discussions.

13. Herteau, Jacqueline. Herbs: How To Grow and Use Them. Grosset and Dunlap 1975.

Chapter on "Herbs or Spices" is beneficial as well as the dictionary of Culinary and Fragrant Herbs.

14. Lamb Around the World. Random House, N.Y. 1970.

This text offers numerous ways to cook lamb and is an interesting addition to traditional Navajo methods. Identificate of Arts & Accompanying Illustrations are useful.

15. Standar, Stella. Soups for All Seasons, Lancer Books, 1973.

This text includes a collection of over 300 soup "specials of the house" from the world restaurants.

16. Los Altos de, New Mexico. Public Service Co. of N.M., Consumer Education Department, 1979.

This specialty booklet addresses the unique problem faced by all NM cooks - high altitude cooking. It specifies the necessayr recipe adjustments for the varying elevations found in New Mexico.

17. Mastering the Art of Franch Cooking. Julia Child, Louisette Bertholle, Simone Beck. Alfred A KN., 1967.

This text discusses the techniques in french cooking in detail with a stress on the step-by-step process required in french cooking.

18. Better Homes and Gardens Cooking With Cheese. Better Homes and Gardens Books, N.Y., 1966.

The Cheese Grade in this book was especially useful during the unit on cheese cooking as many of the cheeses are phonetically spelled & desenoed in detail. Storage & Cooking tips as well as basic recipes are given.

VI. Kcknowledgements:

1. Division of Vocational Technical Education, Food Service Workers, Knoxvill, Tennessee
2. Botel, Botel Reading Inventory Follett Educational Corporation 1980
3. Food Service: Skills and Equipment Prentice - Hall Media, Inc. 180
4. Hoffacker, Vida Davis and Ray, Mary Frey, Professional Cooking and Baking, Peoria, Illinois - Bennett Publishing Company 1981
5. Instructional Materials Laboratory Vocational Vocabulary Module Food Service, Columbia, Missouri: University of Missouri - Columbia
6. Kowtaluk, Helen Discovering Nutrition, Peoria, Illinois: Bennett Publishing Company 1980
7. Mathis, Phyllis Increase Your Vocabulary, New York, New York: Cambridge Book Company 1976
8. Sasse, Connie R. Discovering Food, Peoria, Illinois: Bennett Publishing Company 1978
9. Shirley, Jalso B., and Synder, Jean A., Food Service Careers, Peoria, Illinois: Bennett Publishing Company 1976